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ENERGY AND WATER DEVELOPMENT

APPROPRIATIONS FOR 2002

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS
FIRST SESSION

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
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DEPARTMENT OF ENERGY

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 2002

Thursday, May 3, 2001.

DEPARTMENT OF ENERGY

NATIONAL NUCLEAR SECURITY ADMINISTRATION

WITNESSES

GENERAL JOHN A. GORDON, UNDER SECRETARY FOR NUCLEAR SECURITY AND ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION
ADMIRAL FRANK L. BOWMAN, DIRECTOR, NAVAL NUCLEAR PROPULSION PROGRAM, NATIONAL NUCLEAR SECURITY ADMINISTRATION
BRIGADIER GENERAL THOMAS F. GIOCONDA, DEPUTY ADMINISTRATOR FOR DEFENSE PROGRAMS (ACTING), NATIONAL NUCLEAR SECURITY ADMINISTRATION
KENNETH BAKER, DEPUTY ADMINISTRATOR FOR DEFENSE NUCLEAR PROLIFERATION (ACTING), NATIONAL NUCLEAR SECURITY ADMINISTRATION

Mr. Callahan. Good morning.

Pursuant to the vote of this committee on April 25, today's hearing on DOE's atomic energy defense activities will be held in executive session. General Gordon, can you verify that everyone in the room has the appropriate security clearance?

General Gordon. Mr. Chairman, we have checked and everyone that is in the room is appropriately cleared for the levels of discussion we are planning on today.

Mr. Callahan. To the members of the subcommittee, I would like to remind you that some of the information discussed today will be classified and should not be discussed outside this room.

One last reminder. I would like that all cell phones, two-way pagers and unauthorized recording devices be turned off during the hearing.

I don't have an opening statement this morning. Pete, do you have an opening statement?

Mr. Visclosky. Mr. Chairman, I do not.

Mr. Callahan. Thank you.

Well, with that, General Gordon, we will give you the floor.

General Gordon. Thank you, Mr. Chairman. I am joined today by Admiral Bowman and the Acting Directors for Defense Programs and Nonproliferation, Brigadier General Gioconda and Mr. Baker. With your permission, I would like to proceed with an oral statement, and then I have a rather lengthy statement that we have submitted for the record.

Opening Statement

Mr. Chairman, I thank you and thank the members of the subcommittee for the opportunity to appear here before you today to discuss the 2002 budget for the National Nuclear Security Administration. I want to thank the members for their support of our mission, for the support of the 37,000 people that work hard every day to carry it out; Federal employees, contractors, in the field and Washington, a good solid group of people trying every day to strengthen our security.

What I would like to do, Mr. Chairman, is speak for a few minutes about NNSA broadly, since this is one of the first times we have really talked in session, and then a little bit on the budget details and then go wherever you would like to take us, of course.

NNSA ORGANIZATION

What I would tell you, sir, is that we are making a steady, albeit rather slow progress towards the goals that we all share of achieving an effective and streamlined organization to lead and manage the national nuclear security enterprise that has been entrusted to us. I am not satisfied with where we are and what we have been able to do to establish NNSA as an all-up organization, with the unique identity and the clear lines of authority that we all seek. But we are moving forward and I believe we have made remarkable progress when measured against the barriers and the bureaucracy that we often confront. Even though it has been difficult to move dramatically on some of the organization issues, we have gotten well beyond some of the issues that confronted us at the beginning, such as dual-hatting. We have begun to set up a new framework and management for the NNSA itself. We have brought on board critical staff for a number of the vital issues that we face such as: counterintelligence, security, contracting, and we have made real progress in those areas. We have the Director of Congressional Affairs, we have two senior advisors on board of immense capacity, one for Science and one for Policy. We have an ES&H, Environment, Safety and Health, advisor with great professional experience who comes to us from Naval Reactors; a senior military assistant, a strong chief of staff who knows the system in detail. We have established an Office of Policy and Planning that will help us work better into the interagency community and reach out and make sure we are communicating and working better with the policy communities in Washington.

NNSA MISSION ISSUES

Mr. Chairman, when I started, I elected to spend a large percentage of my time on the very critical mission-related issues that were squarely on my desk when we took over.

Mr. Callahan. Let me just interrupt you for just a second and say that that is a Journal approval vote. That may be one reason a lot of the panel members are not here, I mean the committee members, are not here today. Maybe it would be best if we would go ahead and vote and get back and then to keep you from having to repeat everything you say, when the other members join us. Maybe in the interest of time, we will just go ahead and recess for this few minutes, go vote, and hopefully the other members will join us, and then we will begin the process.

General Gordon. Of course, Mr. Chairman.

[Recess.]

Mr. Callahan. Well, we have some good news and some bad news. That was not a Journal vote, it was an adjournment vote. The bad news is that it didn't pass. The other bad news is obviously there is some discontent in the House, which is very unusual, but that is an indication that we may be interrupted often with these frivolous motions. Someone is not satisfied. But, General, I am sorry to have interrupted you a while ago, but we will proceed on until the next frivolous motion is called, so go ahead, sir.

General Gordon. Thank you, Mr. Chairman. As we broke I was saying that in the early days I had decided to spend a large amount of my time on the very critical mission problems that were squarely on my desk when I took over this job and, therefore, I spent a little less time on the organization itself. But from my perspective and, in part, because of the time I spent on it, there has been some real progress in the areas of mission and I would like to report on at least a couple of those.

MORALE

The first I would tell you is that morale at the labs and the plants is really significantly different than it was several months ago. I would not go so far as to say we have corrected the problems, or that it is not very fragile yet, or there are other shoes that could drop, but it is really significantly different now, in how it feels when one visits the labs, how people talk about their future and the work that they have. It is in part because there is a clear mission. They are starting to see a clear mission, they are starting to see advocacy back in Washington for that, and there is hope for stability in budgets and all we are trying to do. In no small part, I think we are off the front page, and that helps a little bit as well.

SECURITY

We made some good strides in security. We have the Hamre Commission up and running to help us make sure we think about science and security properly. Some people fell into the habit of talking about the balance between security and science, and I am really trying to not consider it a balance. I need to do both. I need to be able to do good science in a secure environment, and if we have--if we actually believe that the culture of the laboratories and the culture of the scientists who design these weapons and test these weapons and understand these weapons don't understand or accept the idea of security, we have a very different kind of a problem on our hands if it is a cultural issue. But the Hamre Commission is trying to make sure it helps us think about that right.

We have established a moratorium on some new policies so that we can make a good review of where we are and what we have going now. We have a program called Integrated Safeguards and Security Management. We are trying to bring security down to the individual workers, make it part of their decision process, part of their everyday work, rather than just decisions that come from Washington on how to run on a day-to-day basis.

We have had success in the counterintelligence business. We have a better balance on the foreign visitor programs. We have the National Academy of Sciences doing a review for us of polygraphs as used as screening tools, and I hope to be able to ask Congress for some perfections in the existing legislation on polygraphs, while maintaining the very highest standards of security.

NUCLEAR WEAPONS COUNCIL

We have been able to change significantly the relationship we have with the Department of Defense and our military partners. The Nuclear Weapons Council has been revitalized and we meet regularly and we discuss and we make decisions and we set schedules. We are working requirements together trying to balance the Nuclear Mission Management Plan of the military with our green book, with our plans to try to work those in a very good way.

[Deleted.] We feel pretty good about how we have restored some of that relationship and those interactions.

FIVE-YEAR BUDGET

We have developed a plan on how we would budget and how we would propose to spend money in this business, and it is an important management tool. What we have been able to do internally is far from perfect and far from complete, but it is a great first start and we know where we are trying to go on that, and it has given us the beginnings of an ability to look ahead beyond the one year, which we have done for so long.

NATIONAL IGNITION FACILITY

Over the last year or so we have rebaselined the National Ignition Facility. We have a clear way ahead on that. We have a new management team in place, and I can report that when we go visit the lab now and when we go visit the National Ignition Facility, the briefings, the perspective is totally different now. Now when I go there, instead of there being a discussion about isn't that going to be wonderful science when we get it done, the program manager is saying, here is what I did last week, here is what I am going to do next week, here is how I am spending the money. Here is where I am short, here is where I am long. Here is what my relationships are, here is what my problems are. It is now very much a management approach rather than a pure science approach. It is being run as a project, Mr. Chairman.

INFRASTRUCTURE INITIATIVE

We developed a major infrastructure initiative to correct the problems at some of the facilities that are now reaching crisis proportion. We have put in place a series of new contracts with stronger provisions and better management from our end. We have a new contract with the University of California for Los Alamos and Livermore Laboratories. We have new contracts and new contractors in both the Y-12 and the Pantex production plants. We have extended and revised the contract with the Kansas City plant. All of these are going extremely well. We see real measurable improvements in each.

We have been equally successful over the last year in the areas of nonproliferation. We have worked hard on detection R&D to provide a full range of capabilities for first responders for the Nation, everywhere from multi-spectral satellites to the smallest hand-held detectors.

MPCA, Material Protection Control and Accountability, programs in Russia have strengthened the security in several thousand Russian naval warheads and 220 metric tons of uranium and plutonium. We have worked hard with the second line of defense. We have helped the Russians put sensors up at some of their sensitive border crossings, and the nuclear cities initiatives and the initiatives for proliferation prevention are providing opportunities for nuclear scientists to turn away from their work in the work of the business to commercial activities and providing opportunities to read us the entire footprint of the nuclear weapons enterprise.

On the highly enriched uranium purchase from Russia, we have successfully now monitored the conversion of about 110 tons of that material to lower grade reactor fuel. We have participated in the strengthening and safety of the operations of Russian-designed reactors. We are looking to convert unneeded material here and in Russia, and we have completed the canning and the safeguarding of some 8,000 plutonium-bearing fuel rods in North Korea.

Mr. Chairman, I won't in my briefing say a whole lot about Naval Reactors today, but I would give you a few points. In particular, my friend, Admiral Skip Bowman, is absolutely doing a superb job by every measure. His organization actually operates 102 naval reactor plants, a number within one or two of the number of commercial plants that are operating in this country today. They safely and effectively and efficiently provide power to some 40 percent of the naval warships of our country. They are developing the next generation of reactors for the Virginia class submarines and the next generation of reactors for the CVNX aircraft carriers. These are all included in the requested budget.

Importantly, I would say Naval Reactors continues to make real progress in improving their business practices and operating at the highest environmental standards. Mr. Chairman, I try to go to school on what Skip is doing and I ask my staff to go to school on how they are doing their business.

STRATEGIC DEFENSE REVIEW

Mr. Chairman, the budget request for NNSA is $6.8 billion, $5.3 billion for stockpile stewardship, $774 million for defense nonproliferation, and $688 million for Naval Reactors.

Mr. Chairman, it is very likely that the numbers for nonproliferation and for defense programs are not final. President Bush has asked the Secretary of Defense, in coordination with the Secretary of Energy, to conduct several reviews to create a new vision for the role of the Nation's military in the 21st century and particularly to look at nuclear deterrence in the post-Cold War environment. NNSA is a participant in this review and its outcome will have a major impact on the workload that we would expect to face in the years ahead. Separate and additional reviews examining U.S. nonproliferation programs, particularly with Russia, and towards this end, I hope we will have a new strategy for our threat reduction activities with Russia and again, NNSA is a participant in those reviews. The Administration will finalize its 2002 outyear funding request for defense and national security activities when these reviews are complete.

Notwithstanding some uncertainty in the details of these strategic reviews, I would like to try to look ahead, talk a little about our request and a little bit about the opportunities that are in front of us. Mr. Chairman, our formal submission defines the details of how we would recommend allocating the requested funds. I will stay at a fairly broad level for the moment, especially since there is a strong probability that we will propose adjustments following the Administration reviews.

FY 2002 BUDGET REQUEST

I would say that the requested budget goes a long way to support Defense Programs, and the stockpile stewardship program, and it actually includes a 4.6 percent increase from last year. So $5.3 billion is a significant amount of money and is, I believe, the only real increase that is being seen in the DOE budget. It will support most of our major campaigns and the technology building blocks for stockpile stewardship. The national assets, the security transportation assets, the national incident response assets will remain high priority and funded. Weapons safeguards and security are a separate budget category and it should meet all known requirements and includes more emphasis on cyber security. At the requested level we will be able to handle the ongoing work for the W87 warhead and begin much needed refurbishment of the B61 bomb, with its first production in the 2004 time frame. We will not under the current allocations, though, be able to support the full plans for the W76 warhead or the W80 warhead, although we would begin preliminary engineering development. At the requested level we will be able to continue our pit manufacturing program and keep that on track, but I don't think I would be able to certify the W88 pit on a date certain at the requested level, at least not without significantly unbalancing the program as a whole. At the requested level, we would not be able to aggressively attack the infrastructure problems that I mentioned earlier.

Other programs would be affected as well, but again, this may change as a result of some of the reviews.

Mr. Chairman, the underlying approach for developing our budget was to keep the programs, all the campaigns in balance, while correcting some of the problems of the past: NIF, pit certification and pit manufacturing. We have proposed to begin to fund the needed refurbishments for those particular weapons I mentioned and to begin to correct the crisis in our facilities infrastructure. So we await the outcome of the reviews to be able to finalize the numbers toward these ends.

Mr. Chairman, the Administration's request for nonproliferation programs is $101 million less than last year's appropriation. At that level, it should be obvious that we would have to curtail efforts in several areas and lose momentum in others. Again, however, the administration is conducting a review of each program and we await the outcome of that review.

From my perspective, we manage a series of programs, and I have highlighted most of them for you that, taken together, really contribute measurably to the very important goal of reducing the threat of proliferation of weapons of mass destruction. NNSA has some real successes in this area because we have been able to integrate the technology and the research, the expertise from the NNSA labs, along with that from some of the DOE labs and from other agencies of the government. We quite literally provide the technical base for so much of what the government does in proliferation detection and the expertise base to work effectively in Russia and elsewhere, attempting to secure materials and weapons and support the international agreements and to reduce the threats we face. Mr. Chairman, it is appropriate that the administration review our programs and come to their own conclusions about the merits.

For me, I would hope that the result of these reviews would lead to a more comprehensive approach, a more integrated approach to nonproliferation and to the threat reductions. The individual programs can be seen and more carefully measured in their own merit and also they can operate together more synergistically. The threefold threat of unsecured materials, available technology and under-employed expertise argues for a strong and effective program. Even so, we remain mindful of how difficult it is to operate in this environment, this Russian environment, and the ongoing reviews and policy development activities must specifically deal with Russian attitudes, their relationships with proliferance, issues of access and issues of sustainability.

Mr. Chairman, in the National Nuclear Security Administration I believe we are making progress. We are making progress on our mission, we are making progress on the organization and, with the very strongly demonstrated support of the new Secretary of Energy, Secretary Abraham, I expect that progress to accelerate. He has been a very strong supporter of our work, activities and mission. He is very much in the camp of what we are trying to do. I, Mr. Chairman, remain excited about our mission and its great importance. We can't be daunted by the magnitude of the problems we face and we need to attack each one of them every day with energy and with commitment. We need to correct the shortfalls of the past but really we need to get ready for the future. This requires that we attract and retain the very best people, give them clear leadership and an important mission, adequate resources to do their job, and a safe, efficient work environment. I remain very much impressed by those in the NNSA who are committed and who work so hard, often under very difficult conditions, and I gain great energy from them when I get to go out and visit them and watch them do their mission on an everyday mission. You can, Mr. Chairman, and you should, be very proud of them.

Mr. Chairman, that concludes my oral statement. As I said, I have a longer statement that we submitted for the record, and I would be glad to proceed as you like.

[The statement of General Gordon follows:]

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Admiral Bowman's Opening Remarks

Admiral Bowman. Mr. Chairman and distinguished committee members, thank you for the opportunity to testify today.

Mr. Chairman, as we discussed in your office just a few weeks ago, Admiral Hyman Rickover organized the Naval Reactors program in the late 1940s. His visionary concept was cradle-to-grave responsibility for all aspects of maintaining and operating the Navy's nuclear-powered fleet, managed centrally by a single purpose and central purpose organization with clear lines of authority, responsibility and accountability, and also, a clear statement of the mission that General Gordon correctly said is so important to these organizations. Naval Reactors' basic structures, policies and practices were preserved in an Executive Order signed into place by President Reagan upon Admiral Rickover's retirement in 1982. The key to Naval Reactors' operational excellence and unsurpassed record of safety has been adherence to the tenets of this Executive Order. Congress has fully supported this concept by writing the Executive Order into law in two defense authorization acts. As a result, I believe our country has benefited.

In so doing, Congress has placed faith in this program and protected the core values that have been the hallmark of our success for more than 50 years and the enabler for continued success into the future. I appreciate that faith. The core values of Naval Reactors must be preserved. I am committed to operational excellence and an unsurpassable record of innovation and safety. We must continue to design and develop and deliver the world's finest warships for our Navy and for our country. I do not take lightly my responsibility to continually revalidate the faith that the Congress has placed in us.

We all recognize that the threats to our country today are not the ones we faced yesterday. How to protect our Nation's interests, and what forces are needed for our defense, and how we respond to those threats are among the most pressing and important issues faced by the leaders of this country today. Just as the Nation's defense environment and requirements have evolved, Naval Reactors has evolved to deliver what is demanded of it.

FY2002 BUDGET REQUEST

Let me quickly recount some facts about our program and about the fiscal year 2002 DOE budget request.

This year's budget request, DOE budget request, remains flat at $688 million from fiscal year 2001 to fiscal year 2002. Therefore, in real dollars, it is decreasing by about $18 million due to inflation. To put my budget in perspective, it is less than 4 percent of the DOE budget and less than 1 percent of this country's defense budget. I think that the returns over time have said that this is a very solid investment.

Today, the Naval Reactors program supports 102 reactors in 55 attack submarines, 18 ballistic missile submarines, 9 nuclear-powered aircraft carriers, and 4 training and prototype platforms, along with a deep submergence vehicle. We have one fewer attack submarine today then we had just a year ago, and the force number could drop even lower if we don't take action quickly.

NAVAL REACTORS MISSION

Our number one priority in the Naval Reactors program is supporting the nuclear-powered fleet and ensuring its safe and effective operation. The average age of my ships today is 16 years. The average age will be over 22 years by the end of this decade. As these ships age, they place a greater and greater demand on Naval Reactors' DOE budgets.

The nuclear Navy is being employed at an unparalleled and unprecedented and unrelenting pace today. For example, the national level intelligence/surveillance/reconnaissance mission requirements for our attack submarines have nearly doubled over the past decade, while the number of those submarines to accomplish that mission have been cut nearly in half. Our carriers are likewise stretched to their limits, attempting to meet all of the power projection requirements and forward-presence requirements around the world placed on them. Every one of our last 11 carrier battle groups to deploy engaged in actual combat.

To meet just the top priority requirements being placed on the submarine fleet, I feel we must refuel the 5 remaining Los Angeles class submarines scheduled for early inactivation and seriously consider converting Trident submarines that are coming out of the strategic inventory to Tomahawk shooting SSGNs. These ships could carry as many Tomahawk missiles as an entire battle group does today. We must also increase the build rate of the Virginia class submarines. But even doing all of this, we are still short of attack submarines and very short of the requirement that has been specified.

Fortunately, our technological superiority is allowing us to stretch the assets we have to fill some of this gap. For example, we have extended the life of selected submarines and we are looking to extend the life of some others still. However, pushing these limits comes at a cost. Life extension exacerbates the aging fleet problem, and as the fleet ages, it does take more resources to watch over it.

Navy is also forward-basing 3 submarines in Guam to get them closer to their operational areas, eliminating the long transit from the West Coast to the Pacific Rim and greatly increasing the mission days on station available from these 3 ships.

We are designing better, more cost-effective ships for the future. When the navy's new Virginia attack class submarine is delivered in 2004, it will provide needed capability for the 21st century at an affordable price. The reactor plant design, which will be about 96 percent complete by the end of this fiscal year, will use advanced component and systems technology, including a life-of-the-ship reactor core, which will make future refuelings unnecessary.

NEW CVNX DESIGN

The nuclear propulsion plant design of the new CVNX, or the carrier of the 21 century, is well under way. That CVNX reactor plant will provide 25 percent more energy than today's Nimitz class aircraft carriers and will have more than triple the electric power available to the skipper, on demand, but will require just half the number of sailors to operate the reactor plant. We are designing and developing the CVNX nuclear propulsion plant without an increase in our DOE budget request.

We are focused on designing and delivering warships to the fleet that are more capable, more adaptable to technology insertion, more enduring, and more affordable. To do so, my program will continue to need the highly qualified and skilled professionals that we have enjoyed to date. To that end, I was particularly pleased with Senate bill S. 242 that supports nuclear programs in our Nation's universities. This bill encourages investment in our universities that promote education and training in the nuclear field. Our laboratories and vendor bases draw to some extent upon this shrinking pool of uniquely skilled individuals.

Where science leaves off, we are employing smart business strategies to get more out of every dollar, as General Gordon said. Multiyear contracts, block-buys, advance appropriations, shipyard teaming, are just a few of the examples of what we are studying. I strongly advocate these types of initiatives, because they use the taxpayers' dollars more efficiently.

The nuclear Navy is a true crown jewel in our Nation's defense arsenal. No other Nation has our level of capability. This is due, in large part, to the wisdom of Congress and this committee in particular. You have consistently supported the program and its endeavors. Naval Reactors' record is strong, the work is important, and the funding request is modest. I offer you my thanks and gratitude.

Mr. Chairman, with your permission, I will submit a longer written statement for the record that contains the DOE budget request and details, along with the program's annual environmental and occupational exposure reports.

[The statement of Admiral Bowman follows:]

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CONCERNS ABOUT NNSA

Mr. Callahan. Thank you very much.

Let me just make some observations here to all of you. I am totally disadvantaged because of your knowledge of these issues and of your professionalism. My staff is very familiar, based upon what they expressed to me, but I will almost have to apologize for knowing technically little about what you do. I have tried to review it over the past couple of months and met with you, and I am impressed with what I have seen, Admiral, with your operation.

General, with respect to NNSA, you know I am hearing some things that it is fairly difficult for me to comprehend about the efficiency of your operation. Certainly the exposure to the press that the Los Alamos incident created in the past year or so has caused all of us to have some reservations about security. The renewal of the contract by Secretary Richardson with the University of California, to us novices it appeared that that was a mistake, that we should have looked at it in a little bit more depth rather than just to have a lame duck administration extend such a costly contract to the taxpayers of the United States. Maybe it is all absolutely needed. Maybe none of the money is wasted. But frankly, we haven't had any answers to the Los Alamos thing, other than what we have read in the paper. We don't know what was on the tapes or how they were able to be removed, if they were removed. We don't know anything but the press' observation of what is going on.

Yet, you come to us with a request for billions of dollars. I know you are backed up by Senator Domenici, who has an in-depth knowledge, a technical knowledge of what you all do and how you do it. I know he knows where you do it because of his interest in New Mexico. But I just have to almost apologize to you for not having had the time or the capacity to totally understand what you do. It is my understanding that you have informed some that the, I guess, $5.3 billion is insufficient and that you need more. That is a lot of money.

I have had the opportunity, Admiral, to be aboard the Nimitz and to see the capacity of a nuclear aircraft carrier and the professionalism that the Navy uses in keeping those ships going, but technically I don't know how long the usage capacity of the reactor core could last. I was told when I was there that it would last 40 years on the Nimitz. I don't know if that is right or wrong, but if it needs to be replaced, it needs to be replaced, and if the new methodologies will eliminate the necessity to refuel it any time during its life-span, that would be great.

But your numbers are astonishingly high. Maybe they are astonishingly low. I just don't know. I can't fathom how you can at any facility spend the balances of dollars you are spending in an efficient manner. But then again, I have not visited a single operation of yours, and so I am disadvantaged. Maybe it is absolutely necessary. I know that the mission is absolutely necessary, and I am totally supportive of it. And if it costs $10 billion, then I would be supportive of it, if that is what it would take. However, I have no way of knowing, absolutely no way of knowing whether or not your requests are justified, whether or not the money is being spent wisely. I just have no way to comprehend whether or not it is factual or not. It is a lot of money. There have been a lot of indications given to me that the programs have not necessarily been successful. Maybe that is not your fault, maybe that is the fault of the system. But it is a complicated issue that I am disadvantaged by.

So I apologize to you--I know what your mission is, but I am talking about for the fiscal year 2002 and for the monies that are requesting as to whether or not they are justified. I have no idea, except based upon what you tell me. I am sure that during the next 6 months or so, we will have the opportunity to look further into it. But frankly, your image is somewhat tarnished because of the Los Alamos situation, further tarnished, in my mind, because of Secretary Richardson's insistence that that contract with the University of California be renewed without being competed. Maybe that is absolutely necessary. Maybe he did the right thing. I don't know.

In any event, I am sure that my colleagues, who have paid attention to this committee in the past, and who have some interests, such as Congressman Wamp, because he has activities under your jurisdiction in his district, and we will work with you. We are going to ask some questions as we go through this process, and we are going to try to determine some degree of accountability other than just an opening statement saying you are doing a good job and that you need more money, and that increases that you have indicated are really insufficient to keep the program in full competition, and then we get to another question: what is competition?

I know that the Russians don't have this type of money to continue their program. I don't know what Russia is spending on their nuclear programs. I don't know how many nuclear submarines the Russians have. I don't know what their capacity is. I don't know what their reserves are. But I am sure as we go through the process, I will learn more. I support your mission, but at the same time we have a responsibility and we can't, just because you say you need it and just because you say that problems that have surfaced have been corrected or missions are underway to correct them.

So some time in the next 2 or 3 months, maybe I will have the opportunity to delve further into what you are doing and to learn more about what you are doing. But at this point, I want to apologize. I don't know of any individual that could just walk into a situation like this and say, well, I read a book last night and therefore, I understand what you are doing. But in any event, we are blessed that we have good, talented staff, and we are blessed that we have good, talented Democrats and Republicans on this committee.

So at this time I will yield to my ranking Democrat so he can impress you with his knowledge.

General Gordon. Mr. Chairman, may I respond momentarily, briefly to your comments?

Mr. Callahan. Certainly.

General Gordon. Mr. Chairman, I would first off like to tell you that we will spend whatever time that you would like and go into any of these issues in any detail that is appropriate. That should be a given. We will operate that way consistently and entirely. To the extent you have some time, I would be delighted if you could visit one or more of these facilities and see some of the people that are trying to do the work and make some judgments for yourself about what we are talking about here.

INFRASTRUCTURE

With respect to the funding issues, let me just tell you that we inherited a system that had been operated for 8 or 10 years at some degree of underfunding and certainly, some degree of inefficiency, no doubt about that. The result of that, though, is a system that had not been well run, not well managed and had not been well-resourced. The second thing is, we had gone through a period of time where the country didn't really know what it was trying to do with respect to some of these weapons. I would tell you we have only begun to turn the corner on some of those points. But we began the program, the previous administration began the program aggressively trying to do things in science that have never been done before at the scientific level. They invested somewhat limited resources in that area. And, in doing so, they failed to have the resources available to go into the infrastructure. That is probably the biggest single increase in some of the funds we are talking about. Somewhere along the line we have to reverse this course of facilities that are falling down and are dangerous to operate in, and there have been enough years of neglect that that is no longer a small business.

Secondly, again, where the money was spent and where the priorities were placed and in concert with the Defense Department was in developing the science side of it, not in supporting weapon rebuild or reconstruction. That was delayed simply because we didn't know what needed to be done. The weapons are now 17 years old. And we are now, through the science-based programs, finding the number of problems that need to be corrected in the stockpile. Those kinds of dollars for that work were not in the original request. That is the basis of, at the very highest level of why we are suggesting some increases are warranted. But having said that, Mr. Chairman, we would be glad to go into any of those programs into detail.

Mr. Callahan. I appreciate that.

Admiral Bowman. Mr. Chairman, would you take one other note, please?

Mr. Callahan. Yes, sir.

NAVAL REACTORS

Admiral Bowman. One of the dangers in having three separate organizations represented under one umbrella organization, the NNSA, is that we sometimes get confused with the budget request and the various programs. Sir, again, my program, the Naval Reactors program, as we discussed in your office, has been a semi-autonomous agency since really 1982, and even before that under Admiral Rickover, but by Executive Order and then by law since 1984. The Naval Reactors program budget request is down $18 million in real terms from last year, and more importantly, is down 30 percent over the course of this decade, during a time that most people familiar with the naval nuclear propulsion warship aspect of the NNSA would expect the budget request to have risen, because the ships are aging, as I indicated in my statement. So one would expect the requirements to go up because it is harder to keep safe this unforgiving nuclear reactor technology on 102 nuclear reactors.

As General Gordon said, if you contrast this program to the Nuclear Regulatory Commission's oversight of 103 commercial reactors, I think you will find that our request is a bargain and our program is run fairly leanly. So I just wanted to make clear that our request is down 30 percent over the decade, it is flat from last year's numbers.

Mr. Callahan. I think, Admiral, I expressed and echoed what General Gordon indicated about the operation of your segment of this.

Admiral Bowman. Yes, sir.

Mr. Callahan. And yours is easier to understand than all of the research. The research aspect of NNSA is very difficult to comprehend. But you all are military people. You have a very clear indication of where you want to go and why you want to be there and where you are now.

Admiral Bowman. Yes, sir.

Mr. Callahan. So yours is a little bit easier to comprehend. But when you get into the research, and you have universities spending billions and billions of dollars of taypayers' monies, and then when they are seriously questioned, you redo the contract for 5 years, and I know that this is not something that you all did, but Secretary Richardson did it, there is room for question there.

So I am not questioning NNSA, I am not questioning anybody. Yours is easier to understand from a novice's point of view, because you have clear missions and clear physical results and operations that we can comprehend.

But comprehending this other side, and when you get into nuclear warheads, into the manufacture of this and the transition of uranium and plutonium, and then all of the computerized testing that now you are doing, that to someone not schooled in physics, as you all obviously are, it is very difficult to comprehend.

Mr. Visclosky.

INACTIVE WARHEADS

Mr. Visclosky. Thank you, Mr. Chairman.

General Gordon, the Department of Energy provided us with a breakdown of the number of active and inactive warheads and the document is dated February 5 of 2001.

[Deleted.] Then in your statement, you mention the disassembly of the W79 artillery fired atomic projectile and that will be completed by 2003, and the disassembly of the W56 Minuteman II warhead, and that will be completed by 2005.

Neither of those warheads, if I am correct, show up on this chart. Is there a reason for that?

General Gordon. That is correct, Mr. Visclosky. What we are showing on the chart are active and inactive, and at least in principle, the inactive could be brought back into service if required. The W79 and the W56 have been committed for dismantlement, so they are not maintained on that chart.

Mr. Visclosky. Would there be any other warheads that are committed to disassembly that would not be listed or are not mentioned in your testimony?

General Gioconda. B53. We took that out of the inventory when we brought the B61 Mod II version, you will see it on your chart there, we brought that into the inventory.

Mr. Visclosky. That is B as in ``boy'' 53?

General Gioconda. Yes, sir.

Mr. Visclosky. That would be the third and that would be the only other one not represented on the chart.

General Gioconda. Yes, sir. There is no instruction to retire, to start the dismantlement of that weapon at this time.

Mr. Visclosky. General, in your comments just now, you said in principle the inactive could be brought back into service. Do you think that that is likely?

[Deleted.]

I guess my fundamental question, and I could go down each one of these, is at some point as the decision has been made to dismantle these other three warheads, are considerations under strategic review being made as to the dismantling of some of these inactives?

General Gordon. I think that will clearly be part of the review that is under way now, of how to proceed and how big and what the status is of the inactive force--at what level the inactive force should be maintained.

Mr. Visclosky. Do you know if it is part of the review?

General Gordon. It is part of the review.

Mr. Visclosky. It is part of the review.

[Deleted.]

General Gordon. The marginal cost is on the order of $20 million to $40 million a year.

Mr. Visclosky. Total?

General Gordon. Yes, sir.

[Deleted.] We don't do significant maintenance on those.

Mr. Visclosky. [Deleted.]

General Gordon. There is additional expense in terms of surveillance that we do on those weapons that falls into that dollar cost. We will give you for the record a more full breakdown on that.

Mr. Visclosky. I appreciate that.

General Gordon. But the point is, sir, the marginal cost of maintaining that stockpile is on the order of $20 million to $40 million on an annual basis.

Mr. Visclosky. Out of your budget?

General Gordon. Yes, sir.

Mr. Visclosky. Okay. Because I am on the DOD subcommittee as well.

General Gordon. And then there is whatever the storage cost might be at the other end.

Mr. Visclosky. You have refurbishment programs that have been proposed for the cruisers, the bombers and the Tridents. Is that upgrade, would that be applicable to the inactive warheads as well?

General Gordon. I think in the initial plans we would not do that for the inactive warheads.

[Deleted.]

Mr. Visclosky. [Deleted.]

General Gioconda. [Deleted.]

General Gordon. Sorry. Nine.

Mr. Visclosky. Okay.

General Gioconda. Sir, we have agreement, since there are so few on the W87, we are going to do them all. The other weapons in the inactive, we have not committed to them because what we have developed is a block concept where we are moving forward in blocks in hopes that either arms control or strategic review will determine the status and what we are going to keep in the inactive. So we are studying what level of readiness, if you will, that we are going to maintain the inactive or move some of those inactives to the retirement rolls.

Mr. Visclosky. So my understanding is that as of today, under the strategic review, consideration is given as to what the disposition or retention should be of the inactives, and that as far as your plans on the refurbishment programs, the only inactives that would be refurbished would be the W87s?

STRATEGIC REVIEW

General Gioconda. Sir, we also not only did a strategic review, that is kind of a broader concept, it will also be considered in the Nuclear Posture Review that is also supposed to continue later this year and go into the exact detail of that. A strategic review of the concept and then the nuclear posture review will work the actual details and numbers of specifics that you are addressing. So when you say strategic review, we mean all the strategic reviews that are going on, to include the nuclear.

Mr. Visclosky. [Deleted.]

[Deleted.] We are never going to use these warheads, are we better off dismantling or disassembling them?

I might also ask, and it will be for the record, what the cost of disassembly would be.

INACTIVE WARHEAD COSTS

General Gordon. I would like to add just a general comment to that, sir, and that is the associated cost both dollar and opportunity costs as these systems go through fundamentally the same process that the systems go through when built. They will require the infrastructure for dismantlements. It has to fit into the overall structure and when you dismantle something, you are obviously not building or refurbishing something else.

LOW YIELD WEAPONS

Mr. Visclosky. Mr. Chairman, if I could pursue one or more line of questioning. There are press reports that the administration is studying whether to develop a new low-yield nuclear weapon that would have earth-penetrating capability. Are any monies included in your budget for that type of research or development?

General Gordon. Nothing is included explicitly with that in mind. We have done work, as you well know, in developing the B61 Mod II which is in the inventory, which has some capabilities in that area, and we are awaiting the strategic reviews to see if we will be requested to look at any other additional capabilities.

Mr. Visclosky. You said they are not implicitly included in the budget. What do you mean by that?

General Gordon. What did I say?

Mr. Visclosky. You said they are not implicitly included, I heard the word ``included,'' as modified.

General Gordon. I worry a lot about the capability of our people to be able to design anything new that they are asked to do. We are doing very little of that right now, virtually none of that right now. Our designers are working almost exclusively, if not exclusively, on the programs that lead up to the refurbishments and the surveillance programs that we are doing as part of stewardship. There are obviously discussions under way with DOD and individuals within the Department and within the laboratories who provide information on how that would come out, but there is no work that you would call an organized design program or funds allocated to it.

Mr. Visclosky. I guess my concern at this point from a budgetary standpoint is that it is fine to determine a new capability that someone would want, but then to balance that off as far as what the budget constraints are that we have, and also the possibility of use. You know, you had the problem with the Aegis ship and you also had the problem of the bombing of the Chinese embassy, and I am wondering what the probability is that a nuclear projectile would be used in anger by this country to have deep penetration, because we haven't used such a weapon, to my knowledge, in 57 years.

General Gordon. I don't think I am the one that is qualified to answer that, with all due respect. I think it is a DOD issue about how something might be used and would or might be thought about being used. Our job would be primarily to respond to requirements that were developed by the Department of Defense in that regard. I am not sure I understand the relationship to the Aegis or to----

Mr. Visclosky. I am just saying accidents happen as far as the use of weaponry. If you are going to use a nuclear weapon and you have a big accident, you have a horrific problem on your hands.

Would the development of such a weapon require live fire testing?

General Gordon. Live fire meaning?

Mr. Visclosky. Would you have to test it as opposed to using simulation?

General Gordon. Let me just give you a broad answer on any new weapon. There is a series of approaches that can be made. If it is a modification to an existing design, a simple modification to an existing design, it would not be likely to require testing.

[Deleted.] If it is an existing weapon, that could be done without nuclear testing.

There are some designs that are off the shelf that were tested well enough when testing was permitted, that one could, with significant confidence, design a weapon that did not require testing.

If it were a totally new design with new features and new physics and new ideas, it would be very difficult, much more difficult to consider being able to do that without a nuclear test.

Mr. Visclosky. Let me just say that if monies begin to be used expressly for the development of such a weapon, if you could notify the committee, I would appreciate that very much.

General Gordon. Yes, sir. The way that it would always work is that it would go through the process of a Nuclear Weapons Council, that if there was anything that moved into the area of development would be an explicitly agreed to decision by DOE and DOD, and we would make that available well in advance.

Mr. Visclosky. Thank you.

Thank you, Mr. Chairman.

Mr. Callahan. Thank you. Also, all of our members will have at least a day or so to submit questions to you all. I have 70 questions of my own. I am not going to ask them all today, but this is part of my educational process that hopefully will allow me to at least begin to understand the complexity of your operations.

Mr. Wamp was here first, Mr. Frelinghuysen, and since he has a facility in his district, we will let him go first.

INFRASTRUCTURE

Mr. Wamp. Thank you, Mr. Chairman.

I welcome you all. I have worked with you all. Admiral Bowman, however, is from my hometown, so I especially welcome you. Good to see you, sir.

Mr. Chairman, I too have been amazed in the last 10 years, as I have studied these issues, the influence that political seniority and clout has, not just on bridges and roads and highways in this country, but even nuclear facilities. So also knowing your penchant for good humor, Mr. Chairman, I will tell you a story which is folklore in Tennessee, but there is a lot of truth to the story. The story is from the early 1940s when President Roosevelt literally called in the chairman of the Senate Appropriations Committee, Senator McKellar of Tennessee and said, Mr. Chairman, we have to hide a significant sum of money in the appropriations bill to pay for a facility to make nuclear weapons, because we have now a real crisis in the Pearl Harbor era. We have to be able to hide this money through the appropriations process, and I just want to know if you can do that for us. And Senator McKellar said to the President, ``Of course we can, Mr. President, where in Tennessee would you like this built?'' And that gave rise to Oak Ridge being a part of the Manhattan Project, and we still have one very instrumental piece of the whole weapons production activities at the Y-12 plant in Oak Ridge. The Y-12 plant, General Gordon has called it the poster child for deterioration of the weapons complex and Senator Domenici even, from New Mexico, said that it is clearly the worst example of aging infrastructure.

All I want to say is NNSA was formed in a bipartisan way here really in the House as a solution to the mismanagement by the Department of Energy of this critical national mission of nuclear weapons. It is still in its formative stage, so the jury is out. However, these men that sit before us here today certainly have answered the call of duty since they were asked to step in and officially handle this area. I have more confidence in this as a DOE subagency today than I have over the last 6 years, no question about it. NNSA is a step in the right direction, but we face significant challenges.

I believe that Secretary Rumsfeld's review of our entire national preparedness for national defense systems at every level will include a significant direction for how much of a priority is the weapons stockpile and stewardship; are we going to maintain this level of nuclear preparedness and if so, why, and what is necessary in order to keep that and maintain that in an adequate capacity.

Nuclear weapons are like the genie in the bottle. The genie in the bottle, you get it out of the bottle, and you can't get it back in. Once you have nuclear weapons and they are on the world stage, you really can't retreat from that, because it is a permanent thing. So we are going to have to maintain a stockpile and be prepared, and there are rogue nations with nuclear weapons and capabilities.

So here we are today struggling through a time of peace and prosperity, trying to identify exactly what is the commitment, plus there is a legacy associated with it. Last year we had to find money to compensate workers that had become sick from their exposure to the materials making the nuclear weapons. So there are, in any conflict, even a Cold War conflict, there are casualties, personally and physically, and we now have casualties because these facilities are over 50 years old, many of them.

When Secretary Abraham came yesterday and talked about his environmental budget not being as much as last year's request, one of the big dilemmas here is how do you take these antiquated facilities and decide which ones go to environmental cleanup and try to clean them up, dispose of them, and then how do you get the money to turn the old buildings into a more state of the art, modern facility, and we are in that transition right now. In the post Cold War era, we have to decide how much and why and then what are we willing to invest to take a new model.

STRATEGIC DEFENSE REVIEW

That is why I believe Rumsfeld is absolutely right in saying that right now, we have to stop, reevaluate this, come up with a new road map for the next 40 years, like General Eisenhower did when he was President. We have not done a top-to-bottom review with the Pentagon and our national military and what the goals are since Eisenhower was President. This Rumsfeld report is the first one since then.

So I believe it is going to lead us to some direction as to what it is in NNSA to do and how much money is it going to require. This is the piece of DOE's activities that now there is kind of military leadership over, because it was either take this from DOE and give it to the military or come up with an agency that had the national security as its primary focus and our weapons stewardship.

So I want to ask you gentlemen to comment on what can we expect from Rumsfeld's report? How is it going to be integrated into your program--particularly on the modernization? You know, the weapons activity I expect to be maintained at about the same level of stewardship that we currently have, you know, plus or minus, but then how will his report possibly lead us into a modernization proposal over the next several years from your perspective today that would allow these facilities to be modified, maybe downsized? We don't need as much as we had, but we need a new model so it is not so blasted expensive, and literally in Oak Ridge some of the buildings, their material is falling in, literally falling in. Now, granted, a lot of those buildings need to be torn down, but that is an expensive proposition too, especially if they ever had a process in those buildings that was radioactive. Then you have all of these incredible costs associated with turning them over from DP, Defense Programs, over to EM, which is Environmental Management. Therein lies our dilemma.

Generals?

STOCKPILE SIZE

General Gordon. We are working closely with Secretary Rumsfeld's people that are doing his studies and we would expect, within weeks, a fairly clear definition of the stockpile that they would expect to have both in the active and in the inactive perspectives, which would then be able to let us go back and recalibrate exactly what we would need to be able to maintain the force structure at the quality that it is today, or better, and just be able to go from that point on.

What we need to know is how many weapons and roughly what type, and what cycle. We would then provide back into that, here is the status of the weapons, here is the quality, the aging that we are seeing now, what do we have to do to do that on a schedule. We have a pretty good idea about that now, but it will get some tweaking as these reviews come out and it will allow us to adjust our fund requests to meet that. We are involved in that. We meet with the people that are doing that on a regular basis and we will turn this analysis back.

INFRASTRUCTURE

You are exactly right in the concept that we have a lot more floor space than we need in many, many places of the facility. In the post-Cold War environment we have already done quite a bit. We have gotten rid of entire plant facilities in this business, and we are no longer in places called Mound and Pinellas and Hanford and Rocky Flats. Places like Kansas City have something like, half the floor space that they had during the peak of all of this and 3,000 versus 8,000 employees. It escapes me at the moment the numbers at Y-12, but I think they are more dramatic than that. At Y-12 and Oak Ridge, perhaps as many as half of the buildings are unneeded in any format. And one of the things we are doing as we go through on the refurbishment programs of the buildings and the reengineering of the buildings is anything we build new, we are trying to take out at least as much floor space, if not twice as much floor space every time we do that.

What we want to get out of that is a comprehensive facilities program that matches a comprehensive rebuild program to meet the stockpile that the Department of Defense will recommend and want, and that is a pretty straightforward process when we know what that is. It is not straightforward to get there. Again, we have let the facilities deteriorate to the point where it is going to be a struggle and there will be risk in all of our programs to meet the details because we have let the infrastructure get to its current state.

SUPPLEMENTAL BUDGET REQUEST

Mr. Wamp. If General Gioconda doesn't have anything to add, I have just one other question. Do you anticipate following Rumsfeld's recommendations of any request from NNSA in a potential supplemental that may move for national security later this year?

General Gordon. The Secretary's staff has included funding in the 050 account that would be focused in this area that would jump start the, primarily the facilities work and a little bit on the stockpile life extension program.

Mr. Wamp. But your 2002 request is adequate, based on what you know today to meet the needs throughout the complex?

General Gordon. The President's 2002 request, as I said in my opening statement, Mr. Wamp, the 2002 request in the President's budget will allow us to do a goodly number of things, including the refurbishment of two of the four systems that we have put on schedule. Until the requirements are resolved by the defense review, there is not adequate funding in the request to do all four of those, systems that we had otherwise planned. There is not adequate funds to begin the infrastructure program as we had suggested before the reviews began. So again, it is very much dependent upon the outcome of the reviews and how the requirements would develop from those reviews.

Mr. Wamp. Thank you, Mr. Chairman.

Mr. Callahan. Mr. Edwards.

NUCLEAR NONPROLIFERATION

Mr. Edwards. Thank you, Mr. Chairman.

Thank you all for your service to our country. I have a special appreciation for public servants who, if they do their jobs successfully, will not end up in the newspaper, because there will not be tragedies.

We are all here because we like to make a positive difference for our districts and our country, and as I think about that, I don't think anything would haunt me more 10 or 20 or 30 years from now after I have left public office than the thought that I might have missed an opportunity to make a small difference in the area of dealing with the nonproliferation of nuclear grade materials in Russia and didn't do it; [deleted].

[Deleted.] So I take the issue--I share the chairman's humility in terms of the level of knowledge and the difficulty of trying to get a handle on these very complicated issues. But I would like to pursue the nonprofileration issue in several ways.

First, if it is possible to give a yes or no answer, and in trying to respect the time limitations here, I would like to establish several facts to just see if I am in the ballpark in understanding the facts of the threat of nonproliferation.

First, fact one, and I am using as a basis for this the Baker-Cutler report on Department of Energy's nonproliferation programs dealing with Russia.

[Deleted.] Is that correct, or approximately correct, to your knowledge?

General Gordon. I don't know the exact numbers, but modest amounts of uranium or plutonium could make a bomb of several kilotons which would have a devastating effect.

Mr. Edwards. Okay.

[Deleted.]

General Gordon. At least in the ballpark.

BAKER-CUTLER REPORT

Mr. Edwards. [Deleted.]

The observation I would like to apply then to those first two facts is the statement from the 9-month report that was a bipartisan report chaired by former Senator Howard Baker, it says, ``Russia today wrestles''--and I would like to ask you if you disagree in general with anything in these statements. ``Russia today wrestles with a weakened ability to protect and secure its Cold War legacy. A number of factors have come together to present an immediate risk, an immediate risk of theft of potential weapons of mass destruction. Delays and payments to guards at nuclear facilities, breakdown in command structures, including units to control weapons or guard weapons usable material and inadequate budgets for protection of stockpiles.'' They go on to say, ``Many of the Russian nuclear sites remain vulnerable to insiders determined to steal enough existing material to make several nuclear weapons and to transport these materials to Iran, Iraq or Afghanistan. The task force was advised that buyers from Iraq, Iran and other countries have actively sought nuclear weapons usable material from Russian sites.''

Anything in that statement from this report that you would strongly disagree with, or would you generally concur with the observations or conclusions I just read?

General Gordon. I may not have said it as dramatically as that, but the thrust of the issue is there. There is significant material and there is risk that the materials and the weapons are not as secure as they are in this country.

Mr. Edwards. Okay. Thank you. I would then go on to point out that the task force says that it compliments DOE for its work, saying that given the resources you had, you have done excellent work, and I commend you for that. But this also says the task force believes that the existing scope and management of the U.S. programs addressing this threat leave an unacceptable risk of failure and potential for catastrophic consequences. They then go to suggest that we spend $30 billion over the next 10 years, [deleted].

My question to you would be this: before OMB sent a directive to the Department of Energy recently saying that we want to have reductions in spending for nonproliferation programs, did either--General Gordon or Mr. Baker--of you two initiate any suggestion that we should cut programs to the magnitude of $100 million or more?

General Gordon. Based on the work we had done and were looking to do, we had recommended a number greater than we had had before. The result of that is, though, that the administration is now conducting a full review of these programs.

Mr. Edwards. So you actually recommended, before getting the OMB directives, you had recommended that we spend increased dollars in the nonproliferation programs; is that correct?

General Gordon. Based on the requirements that were levied upon us before the reviews began.

EMPLOYMENT IMPACTS

Mr. Edwards. Okay. Final question, if I could ask, if you could say quickly orally and if you could add to that in writing, I would appreciate it. I understand that part of the justification for this reduction--I think we all know what happened. We all have in the real world. Democrats had to deal with this, with cuts we didn't like in the previous administration. But OMB sends over a directive, you have to respond to it. But all of a sudden, we hear this rationale that we want to do a review and that is why we are recommending cuts. But I understand that just in the nonproliferation R&D budget, if we don't add to the administration request, there will be 151 employees laid off or reassigned out of that important area that this bipartisan task force said needs far more resources, not less.

Could you please send to the chairman a list based on the proposed budget of how many people in the other areas of your nonproliferation budgets would be laid off, people that we may not be able to get back, expertise that we may not be able to find again, or bring back, if we don't do something to increase the proposed budget?

General Gordon. It is not obvious that they would all be laid off, because we could provide other jobs for the interim period of time.

Mr. Edwards. They could be laid off or reassigned outside the nonproliferation areas.

General Gordon. We will provide that information.

Mr. Edwards. I hope we do at the end of the day work together on a bipartisan basis to perhaps find increases in what I think is this vital area. Thank you, Mr. Chairman.

Mr. Callahan. Mr. Doolittle.

Mr. Doolittle. No questions, Mr. Chairman.

Mr. Callahan. Mr. Frelinghuysen.

SECURITY AT THE NATIONAL LABS

Mr. Frelinghuysen. Thank you, Mr. Doolittle. Thank you, Mr. Chairman.

I guess the questions are to Mr. Gordon or any of his colleagues. Apologies, Mr. Chairman, for being late. I was across the street in another hearing.

At last report, many of my constituents are of the same opinion that some of our national labs continue to be vulnerable to spying and to various leaks. I know you are implementing, according to your testimony, the integrated safeguards and security management program, and you said in your testimony that while we are making steady progress, and I quote, ``The NNSA still has work to do to get security right. Our people must see that there is a value added in new and additional security requirements,'' et cetera, et cetera.

We have stressed a concept of science and security, rather than science or security, and then it goes on to say, our scientists, engineers, technicians, our security and counterintelligence personnel must see themselves on the same team.

My basic question is, do they? I mean I get the feeling that we are moving in the right direction. My point is, for most of our constituents, reading whatever papers they read, either on the East Coast or the West Coast, they might read their columnists, The New York Times, the L.A. Times, the last thing they knew about this is that there were some serious problems. They read of your appointment, but there still seem to be some unanswered questions out there.

Is everybody aboard here, or are you still finding roadblocks? Are you still finding a culture that makes it difficult for you to accomplish your mission? We thank you for what you are doing, but I just wonder if you could give your honest appraisal.

General Gordon. I think we are on the right track, and I think you suggested that in your comments. We are dealing with entrenched ideas and entrenched ways of doing business. We are dealing with some decisions that had been made earlier on how we thought about security, and we probably aggravated the problem in some ways by thinking we could solve it all from

Washington with very specific rules about how one might change their safe combination or how often they should do it, and we took away some of the individuals' responsibility as we did that. The sort of corrective actions we initially applied pulled away some of the individual responsibility that we really need to put back into the system.

So I think we are making good strides in that area. We have brought in--my head of security comes from Skip's organization, Rand Security, and Naval Reactors is working with the folks that are there. We are turning attitudes, and we are trying to get, again, the individual to take that responsibility for his actions, and convince them that this has to be done. It is in their interest and in the national interest, it is part of their job, it is not an augmentation of the job.

What we need to do in the scientific culture though, is actually show them that there is value added to what we do and it is not an arbitrary rule that comes out of Washington and makes no difference.

Mr. Frelinghuysen. Is this done on a regular basis?

General Gordon. Continuing basis, in both security and counterintelligence. And every day, we try to take another step, every day we try to make it a bit better. I think it is better. I will never tell you in any place that I sit, no matter how good we are able to strengthen security, that there is no possibility of anything getting out. There is always a risk when we have this many people doing this many things. But we try to give them the right technology to do their job, the right picture on how to think about their job, the right tools to do the job, and to make it in a way that makes sense to them so that it is part of their business, it is part of how they do business, it is not something that they add on at the last minute, but that they really live it.

CYBER SECURITY

Mr. Frelinghuysen. Two questions I suppose under the rubric of cyber security. Is it possible for employees at the national labs to transfer nuclear secrets from classified to unclassified computer networks and, secondly, what was the outcome of the investigation on the missing hard drives at Los Alamos?

General Gordon. To the best of my knowledge, and I will give you a more considered answer for the record, the only way one could take classified information and put it on a classified system is to physically do it. It will not happen electronically. To physically make it happen, you would have to print it off and type it in or take it off some other media and physically move it as an insider threat might do.

With respect to the hard drives, the missing hard drives at Los Alamos, there is a FBI report on it and I would encourage you to check with the FBI on the fundamental details of it.

But the short answer is that they were not--they reported that to the best of their knowledge, no one outside of Los Alamos had access to or was involved in the issue, which is saying there is no espionage in anything that they were able to interpret in their investigations. The tape was lost, the tape was recovered, and they have no indications, despite a huge effort over many, many months of being able to find any indications that that tape or the data on it went outside of the environs of Los Alamos or the Los Alamos people. They were not able to assign culpability to any individual.

Mr. Frelinghuysen. I just think the public's perception is important in this business, and I must say that there are a lot of constituents vigorously questioning me and perhaps some of my colleagues as to, you know, certainly what we have learned, but in reality, what was the final outcome relative to that issue. We come to these hearings hoping we get a greater level of confidence that we have got a lot of these issues under control. I know you are a no-nonsense person, so I suspect we do. But there is a huge, you know, work force out here of extremely talented and bright men and women, all of whom are excited about their work, want to share their work and things of that nature, and I just worry that at times we don't have it totally nailed down.

LOS ALAMOS HARD DRIVES

General Gordon. This one is a bit troubling, because despite a huge investigative effort, they were not able to ever come to a final conclusion on it, other than the conclusion that it did not involve anyone outside of Los Alamos, which would then suggest the next step, that there is no espionage involved or otherwise loss of it outside. We can't bring it to final closure and tell you exactly what happened. They have been unable to tell you that despite lengthy and expensive investigation.

I would comment, though, that we have learned from that and we are learning better how to handle the procedures. We have more and more people who understand that this is a really huge issue here, we handle the material differently, we account for it differently. It is stored differently. The access procedures to the area where the individuals are doing the work is significantly different.

That is an example, sir, of how, though, we can do some things that don't make sense if we do it from Washington and don't bring the individual involved in. We ruled, we didn't legislate, we required that they make certain changes in their habits and how they proceeded. When we got down to the environment of where the hard drives were, it absolutely didn't make sense and, in some ways, may make security worse because we didn't use a systems approach to what we were trying to do and I think some of the steps we made actually made it worse. We showed individuals who had the custody of the material and the responsibility of the material that we didn't know what we were talking about either and we had to sit down and involve them to make things make sense. We were telling them they had to lock up their materials, their safes, their rooms and turn their computers off when they left their little cubby hole to talk to someone that they were mentoring, but it would take 20 minutes to restore the material.

There are other ways to do it. It is like making sure people who are not cleared are not on the floor. There are smarter ways to do that. We actually went down for a little bit and now we are bringing that back up.

Mr. Frelinghuysen. Thank you, Mr. Chairman.

Mr. Callahan. Mr. Latham.

RUSSIAN WEAPONS SCIENTISTS

Mr. Latham. Thank you, Mr. Chairman.

I would associate myself with Mr. Frelinghuysen's comments, and I guess I am still concerned about the culture within the Department and at the labs. I don't know how you can actually get through to people that there is--who are trained in the science part of it and are very involved with that, but to also make sure that they are as aware of the security portion. I still think that is a real concern. I think you covered it quite well.

My only question would be on--everyone talks about uranium and everything being moved out of Russia. My concern would be having to do with the scientists themselves and with the economy in Russia the way it is and how well we are doing as far as maintaining that--keeping a lid, I guess, on that expertise from moving into rogue countries. Are we being successful, or is there still a drain going to other countries?

General Gordon. There is both. We don't have a lot of evidence of the drain, but we worry a lot about the drain.

[Deleted.] which put some formal charge to it as well. The programs that have been under way and were alluded to and discussed by Mr. Edwards were designed with that purpose in mind, was to offer to the--to many of the scientists other opportunities that are commercial to apply at least some of their scientific expertise in that area and to move out of that system to the, what we call the IPP program, to find creative business opportunities for these individuals, and the programs to actually try to reduce the footprint of the nuclear enterprise.

I would associate myself with the Baker-Cutler report in that regard, that those programs were reasonably successful as far as they went, but there is probably more to do out there.

Mr. Latham. Thank you, Mr. Chairman.

STOCKPILE STEWARDSHIP

Mr. Callahan. General, my background in the real world has been in corporate America, not the government, and having had the opportunity to serve on some rather substantial-sized boards and as CEO of one of those companies, I would have hated to had to explain this program to my stockholders. The failures that are so apparent with my limited background into your arena are astonishing to me, when you look at the billions of dollars we have spent on programs that have not succeeded, and yet we continue to spend billions of dollars and just prolong the agony, prolong the completion date of these projects, is just astonishing to the outside world. But I realize, we are not dealing with the outside world. We are not in the private sector. We are in a situation that involves our national defense, our national security. We are in a situation that involves our national defense, our national security. We are in a worldwide race to maintain superiority militarily, to protect the world against tyrants, and I support all of that. But it is so far from what people can comprehend when you have the massive failures that you have.

I don't mean that this is your fault, General. It didn't happen under your watch, most of it. But when you look at the stockpile stewardship program, costs continue to escalate. There has really not been any evidence or any evidence has not been submitted to me of hardly any success at all, and yet we are still--we come from an original 10-year program with an annual cost of $4 billion to an annual cost now you indicate of about $6 billion. Five years since the program was initiated, and it is still promoting the same program, the same projects and same facilities and project delays. There have been no new approaches identified, no modifications to facilities proposed 10 years ago. Are we on the right track there, or is it time for this board of directors, with you, the management, in the real world to reassess our position on the stockpile stewardship program? I mean what should we do? Continue to pump money in there, or should we stop and start all over again to accomplish our mission?

NATIONAL IGNITION FACILITY

General Gordon. Mr. Chairman, I have to, with all respect, I have to take some exception to say that there has been no successes in this area. I would argue that the stockpile stewardship program with the scientific basis has been successful in many areas and many of the goals have been met or many of the challenges have been attacked in a very forthright manner. There are two issues that are very important. One is, I will not argue with you at all, that the management of the program in the past could have been done significantly better, and for a Secretary to go up and go public one day and argue that he has a program that is on schedule, on cost, and 2 or 3 weeks later find out there is a $1 billion overrun, that is a pretty tough situation to put anybody in.

What we have done is take each of those situations and tried to turn them around by bringing new management in and restoring the management to those areas. The particular issue I am talking about of course is the National Ignition Facility. It was a rocky start, to put it mildly. But what has been done over the last period of time is to put that back on a management footing where we know somebody is in charge with the authority to do the work and trying to use the funds that are balanced out in that area. We have been leading the world in the computer business and all the requirements that have been levied and looking at how big the computers ought to be, how fast they ought to be, continue to be proven on a regular basis, it is being applied ever day in the stockpile stewardship program.

BUDGET FOR STOCKPILE STEWARDSHIP

The stockpile program as a whole would, when we talked about the $4.0, $4.5 billion early on, didn't conceive at that budget level the price that it would cost to actually fix the weapons when you found problems. We have taken these weapons apart, we have surveilled them, we used many of the new tools that have been developed. With that we now know what the problems with these old weapons are, found problems of aging, found problems of birth defects, if you will, of problems that have been there all along that probably would not have been found had we not developed some of these tools or had we not been as aggressive as we have been in the stockpile program.

[Deleted.] That has not been in anybody's budget before. They need to go through facilities that are falling down, because nobody has spent any money or effort on the facilities. They chose, and I probably would have done that same thing in that environment, to take those resources and put them into the science side to be able to be in the position we are now. We are trying very hard to correct management and inefficiency problems, and they were there and some of them clearly remain. I can tell you that stockpile stewardship as a program is working.

Now, should we step back? I think we have stepped back in many ways in trying to figure out where to go from here. We are trying to work with the DOD and from that will give the precise choices that we want to make on fixing the infrastructure. It is going to be very different on a much smaller scale, as Mr. Wamp was talking about, to be able to do that. We have old facilities that we are paying for that we don't even use. We are trying to do that at every point. We need to keep pointed on this, we need to be aggressive, you need to look at us hard and convince yourself that we are on the right track or not; But we are moving ahead, sir, and I have to tell you that.

NUCLEAR TESTING

Mr. Callahan. Well, and forgive my naiveness, or lack of knowledge on the technical aspects of our particular agenda, but do you think, General, that we are ever going to be back to testing nuclear bombs? Do you think any time in the next 100 years we are going to be back to testing of nuclear bombs?

General Gordon. One of the goals of the stockpile stewardship program is to assure the safety and reliability of the stockpile without nuclear testing. It is incumbent upon us to have the integrity to say either we need to test or we don't need to test.

I can't answer your question. I don't know. And I want to be an agnostic about it, because if we can't do it without testing, I have to have enough gumption to stand up and say, we have to do it if you want to maintain that weapon at that state of readiness.

Right now, I would tell you that stockpile stewardship is working to the point that we don't need to test. We certify that every year and it is in no small measure because of the ability of the program to know what needs to be fixed in these aging weapons, and that they can be fixed without resorting to a nuclear test.

Mr. Callahan. Well, I realize that is not the corporate world or the real world, but nevertheless, we are saying on the one hand that we don't really think we will ever get back to nuclear testing. On the other hand, we are maintaining a site to do nuclear testing. I mean when do we reach a stage to say that the agreements that we have made with our worldwide friends indicating we are going to stop testing and that they are not going to test anymore, when are we going to accept that and discontinue spending money preparing a place to test. This is like the Palestinians and the Israelis. We want peace and we want a signed agreement, and then we want to give them money to buy arms to kill each other. I don't quite understand why. If we are convinced that we are not going to go back to testing, why should we continue to spend millions and millions of dollars for a site to test? I mean is there some good reason there?

General Gordon. Mr. Chairman, the task that NNSA has been given is to try to do this without testing and, if called upon by the President, to be ready and able to test, if we either find an issue of such magnitude that we would recommend it because of the safety and security of the weapons system, or if there were external pressures, either from treaties or other things. My job as tasked to me, by the Administration, is to be prepared to test if required.

Mr. Callahan. We have the capacity to know whether any other nations are testing, right?

General Gordon. There is some debate within the Intelligence Community that would tell you that there may be very low yield tests that could be conducted that we couldn't detect. But certainly within the several kiloton range we would know if a test was being conducted in most locations.

Mr. Callahan. And who would be doing those tests?

General Gordon. Who could do those tests? Russia, China, Pakistan, India, perhaps others.

Mr. Callahan. Do our intelligence sources tell us that it is being done in some manner, capacity, some minor type of testing?

General Gordon. I urge you to take a specific briefing on the Russian programs from the Intelligence Community. But we have seen in the last couple of years tests from India and Pakistan, they actually surprised us.

[Deleted.]

Mr. Callahan. Yet, we are continuing to assist, Admiral Bowman, the Russians in their nuclear submarine capabilities, I assume, nuclear-powered submarine capabilities. Is that correct? Are we providing them with assistance to keep their level of capacity up in Russia?

Admiral Bowman. Certainly not to my knowledge, and certainly not--my organization isn't helping the Russians.

Mr. Callahan. How are you cooperating with the Russians? What are you doing over there with the Russians?

Admiral Bowman. My organization has no interplay with the Russians whatsoever.

Mr. Callahan. Are they still building new submarines there?

Admiral Bowman. Yes, sir, they are. But I am not helping them.

Mr. Callahan. What about other countries?

Admiral Bowman. [Deleted.]

On the diesel submarine side, on the non-nuclear submarine side, there are a number of countries who are involved in worldwide marketing of diesel submarines. At last count, the number of diesel submarines throughout the world exceeds 400. So there is a great deal of submarine technology being pursued around the globe.

In the nonproliferation area, Mr. Baker is more qualified to speak on this than I, but my organization again has not been involved in any of the direct U.S.-Russian submarines or that expended fuel. That has really been in the nonproliferation area of DOE and within the Department of Defense.

RUSSIAN NAVY MPC&A

Mr. Baker. Mr. Callahan, what we are doing is [deleted], and because, as you know, up in the Romansk area they had a sailor kill 7 other sailors, and also down in the Vladivostok area they had a killing. So they are worrying about the insider threat. That is the threat to us if these warheads get out.

So what we have done at the 42 sites throughout the Russian Navy Complex? We have gone in and done work at 26 of these sites to secure these weapons. We have gone in to work what we call rapid upgrades. The first thing is to fix things like fences, board up windows, put up guard posts, and then they give us a vulnerability study of the entire site. In other words, we get a lot of information, what the vulnerabilities are of that site before we do anything else. Then we go in to do what we call comprehensive upgrades after we get this vulnerability study, what the vulnerabilities are of that site, and vulnerability studies can be used by many people, including the Intelligence Community, to figure out what they are doing.

So we have gotten into what we call the comprehensive upgrades. We have done four complete comprehensive upgrades at the Russian Navy sites.

So we are in there. It is a real threat. I have seen it myself. In some of these areas there is a guard post you can walk around and get right to the warheads.

Mr. Callahan. Do the Russians know themselves where they all are?

Mr. Baker. I tell you, sir, if you say the Russians, not the Russian Navy, I think we, the United States, have a better idea of how much they have than they have themselves.

Mr. Callahan. Some of them are in other countries other than Russia, like Ukraine?

Mr. Baker. They are out of the Ukraine now as far as we know, but we have in my opinion, a better estimate than they do. When the Cold War was over, they had no idea. They did not have an accounting system. So they didn't know how many warheads they really had. We found that out. We have built accounting systems for them, to track these things.

Now, are we getting it all? That is a good question. We don't know. But we are getting as much as we can. As the GAO Report said, we have secured 193 metric tons of the nuclear material, [deleted] and that is not counting the Russian Navy work. When the Russian Navy asked us to come in, and this was Admiral Kuroyedov, the head of the Russian Navy, they were scared. They have shown us things that not very many people have seen. Why did they do this? Because they were concerned about the insider threat, not the outside threat, and that is why they asked us to come in. We have seen things that not very many Americans have seen.

PAKISTANI NUCLEAR TESTING

Mr. Callahan. Where do the Pakistanisans get their knowledge or capacity to have the testing that we suspect? Where do they get the technical knowledge of how to build such a device? Where do you think they got it from? Russia?

General Gordon. I would be speculating, Mr. Chairman, and again would urge you to check with the agency on that issue. There have been reports of Chinese contacts, Korean contacts. But I would also just make the point that some of this physics is fairly straightforward. American technology developed a bomb in the 1940s, a handful of really smart physicists who have gained material over a period of time can work their way through this. It is much more the ability, the expense, the infrastructure of getting the material, and being able to machine it, than it is to think how to do the design.

Mr. Callahan. [Deleted.]

US/DPRK AGREED FRAMEWORK

Mr. Callahan. The KEDO agreement, are you convinced that providing North Korea with nuclear electrical capacity is--are we providing them with an opportunity that they could utilize in the future under the guise of them not expanding their nuclear capacities? Are we looking at the world with rose-colored glasses if we think that is going to work?

General Gordon. I don't know how to answer that question. What we have done through the agreement and through Mr. Baker's organizations, we have gone over and really secured for international atomic energy safeguards some of the 8,000 plutonium bearing rods that have come out of the reactor at Yongbyong. I don't think I would have an opinion as to how far the next steps will go.

Mr. Baker. The administration right now is going through a review of the North Korean situation. Of course, after that review is done, myself and General Gordon will be in a better position to answer your question.

However, DOE has secured and I think we can say from this agreed framework initially, it has prevented a crisis. We have gone in and cleaned up the pool where, as General Gordon said, we have canned 8,000 fuel rods. We have tagged them for IAEA review. The pond is cleaned up. We have stopped some of the capability right now with what DOE has done on the Agreed Framework. But again, this policy is under review by the White House at the present time and we expect something will come out in the near future.

UNIVERSITY OF CALIFORNIA CONTRACT

Mr. Callahan. Shifting gears back to the University of California contract, we briefly both touched on it earlier, but what was the rationale for extending that contract? I know that Secretary Richardson made that decision, but I suppose--what was the rationale for extending it without competition, despite the serious concerns we had about the performance levels, and what contract changes did the Department negotiate for each laboratory? I mean what was the real rationale behind that? I mean was it political, or did we do it so Mr. Gore can carry California? Why was there such a rush to do that?

General Gordon. I would have no insight at all into the political dimensions of this question, Mr. Callahan. But the technical reasons, as I understand it at least, the Secretary wanted to make some immediate changes to strengthen the performance of the laboratories in light of some of the issues that had just come up. They wanted to do it very quickly. So the question was, how do you go about that? The countervailing to that, was we were also faced with a very desperate set of morale situations at that time. The balance seemed to be, do we try to go off and turn the whole thing topsy-turvy or try to fix what we have, and the decision at the time was to try to fix what we have. That resulted in what is, by my perspective, a much strengthened contract in terms of the corrections that were made in the contract in that we got everything we asked for. They included some significant performance measurements, they included the requirement that they bring in world class assistance in both project and construction management and in security, and that they put in place a Vice President for Laboratory Management who would be very active with respect to managing the labs in a business sense that had not been done before.

So whether that was right or wrong from someone's perspective, the argument was to correct what was there as quickly as possible, and I would tell you that I think we have a pretty good contract. The question you need to be asking me is how well are we running it, managing it, overseeing the changes that have been made. To do that, we have instituted new programs of quarterly reviews, that I personally will be involved in. To date, it seems like it is on a reasonable track.

Mr. Callahan. How many employees would you think that the University of California actually has to oversee or to facilitate this contract? How many people, how many people would be----

General Gordon. I would have to give you----

Mr. Callahan. In the thousands, I would guess. It would be in the many thousands.

General Gordon. That are working it or overseeing it?

Mr. Callahan. That are working in the program.

General Gordon. Oh, I mean the laboratories are 6,000 or 7,000 people apiece, and there are two of them.

Mr. Callahan. And they handle the payroll for all of the laboratories?

General Gordon. The university contract, the California contract that works inside the NNSA boundaries is the work at the Los Alamos National Laboratories and Lawrence Livermore Laboratories in Livermore, California. It does not include Sandia National Laboratories, which is run under separate contract.

Mr. Callahan. I mentioned earlier that I had about 65 questions. I just want to tell you that that list has now grown to 86. To give you an indication, Admiral Bowman, I have seven for you. That is a compliment to you, and also your area of this is less complicated than the area from over here. It doesn't mean that you are that many times better than they are, it just simply means that we can comprehend what you are doing more readily than we can comprehend what you all are doing in an almost quasi-civilian capacity, that that is very complicated.

Mr. Visclosky.

Mr. Visclosky. Thank you, Mr. Chairman. I would like to follow up really along a couple of the chairman's lines, if I could.

Mr. Baker, we had a conversation pursuant to the chairman's questioning about the Russian and nuclear Navy warheads. Given the problems that you face, I am somewhat struck that the budget request you have before us is for $38 million, which is nearly a 50 percent reduction from your--I guess it is not 50 percent, but it is off of $77,551. But do you feel comfortable that you can meet the problems you have described to us today at a 50 percent cut level and was that your request?

RUSSIAN NAVY MPC&A

Mr. Baker. It was not the request, sir, but we can accomplish our mission. Let me tell you what we plan to do.

There are 42 Russian Navy sites and we have fixed 26 of them. What we are doing is going in and doing triage work, rapid upgrades. Where NN funding is right now, I will not be able to do the comprehensive upgrades at the Russian Navy sites. We will have to do it at a slower pace. But the things that have to be done right now to make these sites secure can be done with a budget that is appropriately directed, but the comprehensive upgrades will be slowed down.

Mr. Visclosky. It doesn't represent your full capability. If you had additional money, you could effectively use it?

Mr. Baker. Yes, sir.

TEST READINESS

Mr. Visclosky. The chairman talked about underground testing. Is the administration, General Gordon, considering a change in the standby policy for Nevada, which is currently 3 years. Is there any change coming in that?

General Gordon. I am certain that it is a discussion topic in the review.

Mr. Visclosky. And again, we would be informed of any decision if the standby would be reduced as far as the time period or if it would be extended?

General Gordon. Indeed.

Mr. Visclosky. If it was extended, that is, instead of say 5 years, I assume that the expense related to the tests would be less? Is it hard to say?

General Gordon. It is hard to say. They may not be a lot less. You sort of have a fixed cost to keep the doors open.

NATIONAL IGNITION FACILITY

Mr. Visclosky. General, you had also in your conversation with the chairman, both management generally as well as NIF, said that there are still some management problems. I am not suggesting that the Department of Defense is always right, but when they have a major new technological electronic development program such as a new ship radar or airborne laser, DOD uses a build-test approach. DOD would not go from 0 to 192 laser modules at once as you propose for NIF. Could you indicate if you are or others are seeking some changes as far as how NIF is being approached, and are we now on time and on budget? I hate to use those terms.

General Gordon. I hate to use those terms, too. What we did, sir, was over the last year was really restructure that entire program, which put it on a different cost basis and put it on a different management basis. At this time I would tell you that we are doing very well in the management area. We have the right people in place, and they are reporting and managing, and the reviews that I have had tell us that the cost goals are being met and the schedule goals are being met.

The question you were getting at is to sort of the pace of how you bring this up has been one that has been studied, I think to death in the course of the NIF program is, do you stop at some level and build up. What the reviews continually show is that if you are likely in any way to get to go to the large size, there are some fixed costs up front that you ought to think about.

For example, the building is so massive you really couldn't build the other half of the building, the other three-quarters of the building, for the one point, but secondly, we are already there, the building is done. But what we will be doing--a couple of other points. The economic buy to buy some of the material that goes into it; for example, the laser glass of which there are thousands of pieces of very high-quality, specially made glass, it is only made a couple of places in the world; buying at the slow rate makes little economic sense, if there is a possibility that you are going to go to the higher end, because actually people may stop making it, so we are trying to buy it in economically sensible quantities. When you get to build the laser itself, though, it doesn't come on line the first day at 192 beams it starts coming on line at 4 and 8 lasers in a row, it builds up through 48, and there are opportunities, and there will be experiments run up through that 4- or 5-year time period when the lasers will come up. We are not envisioning what you would call, what some might call a stop at 48 or 96 or something, to step back and wait a couple of years, because other parts of the laser are being added on while it is still being run. But we will be running both experiments and development pairs over periods of several years as the laser comes on line. It doesn't come on line the first day at 192 beams. There will be both development work and real experiments work at all the levels up to it.

PLUTONIUM PITS

Mr. Visclosky. General, you had mentioned some other management problems that exist. Again, I am not looking to single anyone out or castigate anyone, but is there an agency or a program or two that we should pay special attention to that in conjunction with your work we are funding and oversight responsibilities could be made better?

General Gordon. The one that I still worry about the most is what we call pit certification, certification of the ability to build a new plutonium pit for the W88 or for any other weapon.

To be really straight up, that program was not unlike NIF in how it started. I am being fairly brutal, but it was underfunded and underdesigned and underplanned and underthought-out and underconceived and it may or may not have gone to the wrong place in the first instance to try to build something like that in a laboratory. The management of the whole idea was done a little bit more from the scientific side than it was from the project side.

So what we have been trying to do is basically do what we have done with NIF, which is put it on a project basis with someone in charge, we know who is in charge, know what the schedules are and know what the immediate steps are. That is the one that I worry about the most and the trick that I can see is to end up doing the same thing you do to NIF, get it on a solid, professional project approach, and we are doing that, both in General Gioconda's organization by establishing a focused office there, we are doing it at the laboratory itself, and we are doing it through the university contract.

NAVAL REACTOR EXPERIMENTS

Mr. Visclosky. Sixty more seconds, Mr. Chairman.

Admiral Bowman, there was an article recently about super cavitation and the trade-off between stealth and speed. It left me with the impression the Navy is doing research in that area. Is any of that research being conducted out of your office?

Admiral Bowman. We are conducting no super cavitation experiments.

NUCLEAR MATERIAL THREATS

Mr. Visclosky. That is all I needed to know.

The last question I would then have is during our threat briefing at DOD in March, it was indicated that obviously you have a problem as far as the submarine program and a range of others, but fissile material was one that was mentioned as the most troubling. For the record, in whatever time I have left on the 60 seconds or the chairman's discretion, could you just give us your impression of where we are?

General Gordon. I think it is a real issue, and we just need to stay on top of it every way we can. The knowledge, a knowledgeable person can build a weapon. The long pole in the tent to keeping a rogue nation from getting the bomb is not knowledge, it is material. That is the shortest answer I can give you.

Mr. Visclosky. Thank you.

Mr. Callahan. Ms. Roybal-Allard.

Ms. Roybal-Allard. Thank you, Mr. Chairman. I apologize, I was in an Energy and Water hearing, as was Mr. Latham I guess, earlier.

Mr. Callahan. I thought we were Energy and Water.

NATIONAL IGNITION FACILITY

Ms. Roybal-Allard. I am sorry, Commerce, Justice, State.

First of all, let me just openly admit that this is a new committee for me, and the areas that it covers are also very new, so I am in a learning mode right now. So most of my questions are really going to be by way of learning and understanding, and I beg the committee's indulgence.

I would like to start with something that is a little bit closer to home, and that is the National Ignition Facility at Lawrence Livermore National Laboratory in California. If you could help to explain the importance of the National Ignition Facility to our stockpile stewardship program and how, without the NIF, we would be able to accomplish the goals of the stockpile stewardship program.

STOCKPILE STEWARDSHIP

General Gordon. The stockpile stewardship program is really trying to do things that were never done before, never even really thought through in some of the earlier weapons design.

It comes as a surprise to many, including myself, that we really don't understand the moment of ignition of a nuclear weapon, those nanoseconds, that time frame that that occurs. We don't know what happens.

The program that we have developed for 50 years of nuclear weapons was really built on underground experimentation, sort of try it and adjust it, try it an adjust it. Literally, we would have built a design and tested it and then tweaked it, make it bigger, smaller, lighter, change the shape of it.

One of the things we are trying to do in the stockpile stewardship program on the whole is really understand the function of the weapon and the material that is in it in those very intense moments when it starts, because that is--little tiny changes in the system make huge changes in the output of the system. Little instabilities, little inequalities that come out. What we are trying to do with that system is really learn the gory detailed physics at that time frame. There are other aspects of it too, but that is the key part of it. That is one part.

I want to just say that that one of the laboratories, Lawrence Livermore Laboratory, believes strongly that that approach is how they are going to both be able to certify weapons in the outyears, and it is how they will train and test the designers of the future, the physicists of the future. Can they run the codes, can they do the designs, and then match that in that test? So it is designed to give us real data, to validate computer codes, designed to validate designers, if you will, the physicists themselves, because unless something else changes, there won't be a nuclear test in which to prove that they can actually do the work that they are asked to do.

Finally, I would say that it has no small--it is of no small import to the retention and the attraction to young physicists, young designers to the Lawrence Livermore Laboratory.

Ms. Roybal-Allard. In some of the reading that I had done, I understand that there were actually some problems with this project in the past, including cost increases and schedule slippage. Now that you have had a chance to analyze the NIF and submit a revised budget baseline, could you describe what were some of the underlying causes of these problems?

NATIONAL IGNITION FACILITY

General Gordon. I think the program just wasn't being run as a project, it was being run as a science experiment, to be fairly blunt about it. It was a very, very difficult and large-scale project that the physics are very good on, the physics are well understood on, and we are asking a laboratory to do a huge engineering and construction program that they perhaps in retrospect were not well suited to do.

What we have done to try to get that back on track, and it is back on track, although be it at a significantly higher cost, is we forced management changes. We have managers out there who we have confidence in, who spend the full time managing this project. In my last visit out there I could see a real and feel a real change in how the program is being approached. The first couple of trips out there, you say, isn't this a big building, isn't this really great science. Now you go out and they say, here is what happened, here is what we did last week, here is what we are doing next week, here is my cost line, here is my contingency concerns, here is what I am worried about technology, here is how I am making progress on this.

In addition to that, they hired a contractor for the physical integration, of the laser in this very huge building, but it is going to be very full, and to bring in a construction engineering firm to do that integration as opposed to try to do it with laboratory scientists.

So I think from that standpoint it all looks like it is back on track in terms of being well run, and managed program, and I am pretty happy with how that part of it has gone.

LAB AND PRODUCTION PLANT MORALE

Ms. Roybal-Allard. You are saying it has also had a positive impact on personnel and their attitude, these changes?

General Gordon. You just see a sea change, you really do see a sea change in both the people that are there and even in the laboratory as a whole. When things go badly, things go badly. When I first came to this business, it was difficult--and Livermore was finding it difficult to get people who want to work on NIF because they didn't see its future and they were very aware of the problems. Now the lab director has people standing in line saying, I want to go to work on that program.

Ms. Roybal-Allard. So there is an improvement in morale, because I had heard it was very poor.

General Gordon. I think there has been an improvement in morale across the board in the weapons complex over the last year or so. We have gotten a number of the security problems behind us, off the front page. The Congress has been generous in supporting some of the concerns that the scientists had. They see a way forward. As I suggested earlier this morning, I wouldn't try to tell you that it is perfect, that it is fixed, but we certainly have stopped the slide and there is a different feeling when you go to every one of our labs and plants. Because people are looking ahead, they are working on real programs. We have laid out for the first time a program to really do major stockpile life extension programs on four of the weapons and people are planning for it, so they see this longer range future. They didn't know where they were going before.

Ms. Roybal-Allard. Also, it is my understanding that you have significant partnerships with other agencies and other laboratories, as well as the private sector. Could you please describe the role that each partner plays?

LABS AND THE PRIVATE SECTOR

General Gordon. I think it is very important that there is a huge investment in these laboratories in both facilities and people and the training. I was concerned, and others were concerned as well, that when NNSA was formed, that that would somehow build a barrier to the rest of American science or the laboratories and we have actually worked very hard not to do that, because we need from the weapons side of the business or the technology side of the business, to reach across the boundaries and bring material in. I think we have developed capabilities that we need to make available outside. So we work very hard to keep those relationships open.

Within the other laboratories that work for the Department of Energy and within academia, we depend dramatically on the universities to bring people in. We run large, fairly large post-doc programs at each of the laboratories that reach out to academia and bring people in who are going to work on the programs and do the science we need.

Then there are other programs that allow us to take technology that has been developed and offer it out into the commercial environment. The latest example is probably the most spectacular. It is called extreme ultraviolet lithography, and it is a technique where American industry actually put $250 million into these programs to develop the prototype of what will be the next generation of how the world makes silicon chips for computers and significantly change it by orders of magnitude how much material can be printed on a chip, which will allow this thing called Moore's law to continue for several more decades. It has been a huge success.

This is technology that starts in some of the micro electronic work that gets done, it flows back into American industry at sort of no cost to the taxpayer, and then we will find ways to bring that technology back in to apply in our specific programs. So we do that with some industry, we do that with universities and we have relationships with a number of universities. People will come in--the simplest programs are people spending their summers doing research at one of our laboratories.

Ms. Roybal-Allard. You more or less answered my last question, because now that I am on the Energy and Water Committee, I get asked by a lot of my constituents, you know, what is the value of these programs, especially since it is such a large part of the energy budget, and I think you just gave me one example of how society benefits.

General Gordon. Another example might be the requirements that we have developed and pushed a fair amount of money, which is key, is the Advanced Strategic Computing Initiative, which is really driving American industry to advance the multi-track machines, the really high speed computers that are the future, and we are now starting to see other elements of government starting to invest in these machines, in the weather business for example. There are capabilities that don't exist in any other environment.

Ms. Royabal-Allard. Thank you, Mr. Chairman.

Mr. Callahan. Mr. Edwards.

CHEMICAL/BIOLOGICAL AGENT NONPROLIFERATION

Mr. Edwards. I will keep it to 3 minutes or less, Mr. Chairman.

General Gordon, could you tell me, was the Department of Energy planning on performing a chemical agent detection test in the Washington Metro Area in fiscal year 2002 if it had been funded?

General Gordon. Could you answer that, Ken?

Mr. Baker. Yes. We have, Mr. Edwards, we have already done some tests with the Washington Metro, three of them. We have put smoke bombs out at 3 o'clock in the morning and done some testing there. We are going to do more testing.

Mr. Edwards. Is there a test you are having to cancel because of the budget cut, or not?

Mr. Baker. We are looking at that right now, sir, whether we have to cancel it or not.

Mr. Edwards. About 2 minutes left, could I ask you, going back to the Russian Navy situation, 42 sites, you said 26 of the 42 had initial corrections done.

RUSSIAN NAVY MPC&A

Mr. Baker. Yes, sir.

Mr. Edwards. Of those 26, you said only four have gone through the comprehensive upgrade. Of the other 26, are there others in your opinion that need comprehensive upgrades to protect our national security interests?

Mr. Baker. All of them will need comprehensive upgrades. Let me say, at least the majority of them will need comprehensive upgrades. What we are trying to do first is to make sure the warheads are secure. And then under comprehensive upgrades, we are going in and building radiation detection systems, we are building accounting systems and things like that that will need to be done, but the rapid upgrades will make them secure, more secure. It takes 2 to 3 years to do comprehensive upgrades on these sites. We do the rapid upgrades in less than 6 months.

Mr. Edwards. That particular budget is being proposed at a level of cuts of $38 million, is that correct?

Mr. Baker. The budget will be cut at around $30 million.

Mr. Edwards. I think it is $39.5 million.

Mr. Baker. The whole MPC&A program, sir, is $138.8 million.

Mr. Edwards. Okay. Finally, minute or less, 26 from 42, you got 16 sites that there has been neither an initial fix or comprehensive fix. Are those sites that pose potential threats to our security interests?

Mr. Baker. We will go ahead and do the rapid upgrades on those as quickly as we can.

Mr. Edwards. Is that determined by the budget, or is that determined by cooperation with the Russians? If you had additional money, could you carry those out more quickly?

Mr. Baker. If we had more manpower and maybe more money, we could carry some out a little more quickly, but it depends somewhat on the Russians. The Russian Navy is letting us see things that we have never seen before. However, the Russians don't like that, needless to say. They only let a handful of people in there right now to do this work. This is because of Admiral Kuroyedov, so even if we had more money, we probably could not do it much faster, unless they allowed more people to get on site.

Mr. Edwards. Thank you very much Mr. Chairman. Thank you.

Mr. Callahan. Thanks to you all, to the four of you for coming today. We would appreciate your quick response to our written questions. I am going to try to visit many of the facilities in the next several months, but probably won't have time to visit any significant number before we begin writing the budget when the allocations are given to us. But I do look forward to trying to better understand your area of government and this very scientific world that you all are so familiar with, that I am unfamiliar with. But thank you all for coming.

General Gordon. Thank you very much, Mr. Chairman. We look forward to hosting you at as many of those as you can find time to visit.

Mr. Callahan. Thank you.

[The questions and answers for the record follow:]

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Wednesday, May 9, 2001.

DEPARTMENT OF ENERGY

WITNESSES

CAROLYN L. HUNTOON, ACTING ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT
LAKE H. BARRETT, ACTING DIRECTOR, OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

Mr. Callahan. Welcome, Dr. Huntoon, Mr. Barrett, to our subcommittee. We will hear this morning from Dr. Huntoon, who is the Acting Assistant Secretary of Environmental Management for the time being, and from Lake Barrett, who is the Acting Director of Office of Civilian Radioactive Waste Management program. So we welcome you to our committee, look forward to working with you during the next several years to make sure that we have adequate resources for the energy problems that face your department, and look forward to hearing your testimony today.

Mr. Visclosky, do you have a opening statement?

Mr. Visclosky. I have none.

Mr. Callahan. I have none, either.

Dr. Huntoon.

Opening Remarks of Dr. Carolyn Huntoon

Dr. Huntoon. Mr. Chairman and Members of the Committee, it is a pleasure to appear before you today. I am here to ask you to support our FY '02 budget for the Environmental Management program in the Department of Energy.

Fifty years of nuclear waste production enabled us to win the Cold War, but it also left behind a legacy of profound environmental contamination. I am talking about trillions of gallons of contaminated groundwater, millions of cubic meters of contaminated soil, millions of gallons of highly radioactive liquid waste, and thousands of contaminated buildings across our country.

Although our progress in addressing these problems was initially slow, I believe we have turned the corner and we are now seeing real and tangible progress in cleanup of these sites. For example, we have completed cleanup of 71 of 113 sites--that is 66 percent-- and will have completed three more by the end of this year. We have completed cleanup at over 4,900 of the nearly 10,000 release sites, or 49 percent; and we have stabilized 57 percent of our nuclear materials residue and 12 percent of plutonium metals and oxides.

At the Hanford site in Washington State, we are moving spent nuclear fuel from the Columbia River into safe dry storage. At the Oak Ridge Reservation in Tennessee, we completed the cleanup of ``Gunite tanks'' years ahead of schedule, using a suite of innovative technologies. At Paducah in Kentucky, we completed the removal of the infamous ``Drum Mountain.'' At the Savannah River Site in South Carolina, we produced over 1,200 canisters of vitrified high-level waste. We have disposed of almost 1,400 cubic meters of transuranic waste at WIPP in New Mexico, and we are doing so well at Rocky Flats in Colorado that closure by 2006 is moving from a vision to a realistic goal.

In short, we have accomplished a lot and we have accomplished it safely, but we still have much more to do. In FY '02 we are requesting $5.91 billion for this program. This may not be as much as some people would like, but the good news is that $5.9 billion is still a lot of money. I believe we can continue to make considerable progress with this funding.

The budget continues to place the highest priorities on protecting the health and safety of our workers and the public at all the DOE sites, and continuing work to mitigate our highest risk. We will ensure that nuclear materials are properly managed and safeguarded. Maintaining compliance is a priority. That, given the demands on this budget, will be a challenge at some of our sites.

We have given priority to several key projects that will reduce high risk, provide significant ``mortgage'' reduction, and are key to completing activities at other sites. These projects include keeping Rocky Flats and Fernald in Ohio on track to meet their accelerated closure schedules; continuing progress to design and construct a vitrification plant to immobilize the high-risk, highly radioactive waste at the Hanford site; vitrifying the highly radioactive waste at Savannah River and selecting a technology for pretreating a portion of that waste; almost doubling shipments of transuranic waste to the Waste Isolation Pilot Plant (WIPP) in New Mexico to support closure or compliance requirements at other sites, including shipments from Idaho, Rocky Flats, Savannah River, and Argonne National Lab; stabilizing spent nuclear fuel or moving it from wet storage into safer dry storage at a number of sites around the complex; continuing progress on disposing of waste and cleanup of sites; completing active cleanup at the Weldon Spring site in Missouri; and developing a long-term stewardship program to monitor and maintain remedies after cleanup is completed.

The budget continues to fund development and deployment of new technologies that can help us reduce our costs and schedules. The FY '02 request also funds high-priority new responsibilities, including the turnover of the uranium enrichment plant at Portsmouth, Ohio and activities required to keep it in a safe and operable condition; design and construction of the depleted uranium hexafloride conversion plants at Portsmouth, Ohio and Paducah, Kentucky; and acceptance of some excess facilities from the National Nuclear Security Administration and the Office of Science for eventual decontamination and decommissioning.

The Secretary has challenged every program in the Department to become 5 to 10 percent more efficient. In addition, he has challenged us to reduce the schedules and costs of completing cleanup. The Environmental Management budget reflects this challenge.

The Secretary has asked me to initiate a top-to-bottom assessment of the program which will be completed by my successor. The goals are to strengthen our project management; reduce contractor overhead; employ effective contracting strategies; ensure we are performing work as efficiently as possible and in the proper sequence; and to ensure that our decisions are based on sound science.

In implementing this approach, we will continue an open dialogue with the Federal and State regulators. The Secretary has invited the governors of the States which host our sites and EPA Administrator Whitman to work with him to find more efficient ways to do business and improve the compliance framework that governs much of the Department's work at these sites.

By working together with our Federal partners and our contractors, with the support of this budget, we can develop solutions to achieve our shared environmental goals more efficiently. Thank you for your continued support of this program.

[The prepared statement of Dr. Huntoon follows:]

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Mr. Callahan. Mr. Barrett.

Opening Remarks of Mr. Lake Barrett

Mr. Barrett. Thank you very much, Mr. Chairman and Members of this Committee, for the opportunity to present our 2002 budget request.

Our budget request advances our Nation's policy for spent nuclear fuel and high-level waste management. The request presumes the Department will make an informed, science-based decision on further development of the Yucca Mountain site, later this year.

If a decision is made under the process outlined in the Nuclear Waste Policy Act, we will proceed into the next phase of site development. The budget request begins a transition from the predominantly investigative science of the site characterization phase to the engineering and design phase, to prepare a complete license application for submittal to the Nuclear Regulatory Commission.

Management of nuclear materials in a repository is important to support the continued operation of our Nation's commercial nuclear power plants, which provide 20 percent of our Nation's electricity. It is also essential for our national defense and international nonproliferation objectives.

After nearly 20 years of cutting-edge science to determine whether a geologic repository would perform safely, we are close to making a decision on whether or not to proceed with developing the Yucca Mountain site. Our fiscal year 2002 request is $444.9 million, a modest increase over fiscal 2001. In the next fiscal year, most of our resources will be applied toward preparing a complete license application to the Nuclear Regulatory Commission.

However, science will not end should a decision be reached to proceed with applying for a license to build a repository. Our program will continue to strengthen and evaluate the underlying scientific basis for any future decisions regarding the site.

We have allocated $355 million, about 80 percent of our total request, to conduct the activities at Yucca Mountain. For example, the core science funding will increase by 15 percent to a request level of $76 million. These activities will support our ability to model individual and combined natural processes necessary to assess how a repository might perform many thousands of years into the future.

Design and engineering funding will increase 41 percent to $104 million. This substantial increase in these activities, which were deferred in the past due to previous year budget cuts, is necessary to resume, and in some cases accelerate, engineering and design work to develop a complete license application.

For instance, we will integrate new design concepts for accepting and handling the different types of spent fuel and high-level waste that we might receive at the facility. We will also evaluate how a flexible repository system can integrate new technologies and new operational concepts as they may become available in future years.

An operations and construction funding request of $35 million is, in part, to be used to build additional thermal test alcoves and experimental niches to gather performance confirmation data in the repository emplacement block. The remainder will go to maintaining the surface and subsurface infrastructure which supports the core science activities.

If the Yucca Mountain site is recommended and approved for further development, a transportation infrastructure must be available to move spent fuel and high-level radioactive waste in sufficient quantities to meet our obligations. We have requested $5.9 million to begin the long lead-time logistical and planning activities in that area.

I have noted in my written statement some of the opportunities and challenges we are facing, but I will summarize a few here.

If the Yucca Mountain site is ultimately recommended for further development, future program costs could far exceed past appropriations. The Administration's budget request recognizes these future funding challenges by affirming support for efforts to use the nuclear utilities' budgetary receipts for their intended purposes in the program.

The program is looking at the engineering, construction, and operational strategies for managing potential annual cost increases. These strategies seek to distribute annual costs over the next 10 years using modular repository construction and operational approaches.

The program also intends to submit its report on alternative means of financing and managing the Federal repository to Congress in June of '01, as requested by this Committee, and we look forward to working with this Committee after submission of that report.

I am gratified that the Department's Inspector General's inquiry concluded that there was ``no evidence to substantiate concern that bias compromised the integrity of the site evaluation process.'' However, the report identified several statements that the Inspector General concluded ``could be viewed as suggesting a premature conclusion regarding the suitability of Yucca Mountain.''

After receiving the Inspector General's findings, both Secretary Abraham and I communicated our firm belief to all the program's Federal, laboratory, and contractor employees that our work must be performed in a manner that reflects the integrity and objectivity necessary for conducting world-class science. We will continue to operate this program in an open and transparent manner worthy of public confidence and trust.

In conclusion, we have made considerable progress despite enormous challenges. Our budget request supports the next step in the process, development of a license application for submittal in 2003. I urge you to consider favorably our appropriation request, and we will be pleased to answer any questions that the committee may have.

[The prepared statement of Mr. Barrett follows:]

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Mr. Callahan. I am sure there will be questions. However, we have a journal vote that we have about 5 minutes to get to the floor and vote, so the committee will stand in recess until we get back.

[Recess.]

Mr. Callahan. We appreciate your testimony, and we are sorry for the interruption, but I guess that happens up here sometimes, does it not?

In any event, Dr. Huntoon, the department's budget request for cleanup is $6.3 billion, a reduction of $460 million from last year. Now, the Secretary has initiated a new top-to-bottom review, and you mentioned it in your opening statement, of the program, and believes he can find enough efficiencies to keep the site cleanups on schedule.

Can you describe this review a little bit more in detail? I know you touched on it during your opening statement, but----

Environmental Management Assessment

Dr. Huntoon. Yes, Mr. Chairman. Secretary Abraham believes, as I do, that we can find efficiencies. It has been over 10 years since we signed a lot of the agreements and set strategies out at many of the sites. In that period of time a lot of technology has been developed. We have gotten smarter at some of the procedures, we have gotten better at contracting, and yet we have not taken a complete assessment, as a top-to-bottom review would do.

So I think there are several things that the Secretary has charged us with, and I will mention a few of them. One is to identify better ways of doing business across the board. As I mentioned, we are doing it in some areas.

One way is the application of innovative contracting strategies, which we have begun at some of our sites now. Rocky Flats is one of them, but we have put innovative contracts into place at several other sites. We need to keep looking for opportunities to use innovative contracting strategies, and look at all of our contracts and make sure that they have used innovative approaches to reduce the costs and schedules.

We are talking about sequencing the work better and applying risk-based approaches. I think data quality is an issue. We need to look for innovative ways to meet our obligations that we have to the communities that our sites are in, and we need some approaches to talk with the regulators and the governors. As I mentioned, the Secretary has asked the governors to name people to sit down with us and have these discussions, and we will be doing that in the very near future.

We divided the early part of the assessment into two parts. We are going to be meeting with our regulators at the various States where we have sites. We are also going to ask our contractors to tell us back at DOE what DOE is doing that is costing them time and delaying schedule and addings costs to contracts. Are there things that DOE is imposing that are onerous burdens on contractors?

Mr. Callahan. What DOE sites, cleanup sites, will be out of compliance at the requested 2002 level of funding?

Compliance Activities

Dr. Huntoon. Mr. Chairman, I am not sure exactly which sites are going to be out of compliance because we are still trying to deal with that. Our intent is to meet our compliance obligations.

We are going to have to sit down and talk with the regulators at some of the sites, because we are going to miss some of the milestones. We already knew, before the budget was ever even proposed, that there were some milestones--well, the regulators knew it, too--there were milestones that we were not going to make.

For example, this summer we were supposed to start construction on the vitrification plant in Washington State, and everyone knew that that milestone was not going to be met. So there are milestones like that, that we are going to have to sit down and talk with the regulators about, and see if we can adjust our planning and our work schedules. We intend to meet our agreements.

Mr. Callahan. Well, there is nearly a half a billion dollars, your request is a half a billion dollars lower than this fiscal year. And you do not know at this point which sites will not be in compliance at this budget level in 2002?

Dr. Huntoon. We have an idea, Mr. Chairman, on several of them, because there are out-year compliance agreements that have to do with environmental restoration, and since that was the lowest priority in the budget that was formed, those areas will be the ones that we will have the most trouble meeting. We will have to sit down and talk with our regulators about them. We intend to clean up and meet our obligations; it is just the timing on them.

Mr. Callahan. Why do you not just provide us a list of additional funds required, then, to stay in full compliance?

Dr. Huntoon. Okay.

Mr. Callahan. And at the same time show us where funds might be an indication that you may not be in compliance. You know, we are not a policy committee; we are a money committee.

[The information follows:]

[GRAPHIC] [TIFF OMITTED] T3724A.891

Dr. Huntoon. I understand.

FY2002 Compliance Requirements

Mr. Callahan. And we do not want to make policy. We just want to provide you with adequate money. At the same time, we have some responsibility. It is unusual that an agency comes with this reduction request and tells us that they may not be in compliance. It appears to me that the agency would be saying to the Congress, ``Give us enough money to stay in compliance.'' But, anyway, I guess the system is that.

Site Characterization Activities

Let us jump over to Yucca Mountain, and just talk about this to both of you, I guess, to find out where we are. You know, we see an indication of some missing links in the track. The train is barreling down that track. Nevada is doing everything they can to stop the train.

Where are we now on Yucca Mountain, and can we make the deadlines, which are sometime later this year, to proceed on with this study? Is there an indication that we are moving in the right direction? Where are we on Yucca Mountain at this point? And also respond as to what the water problem could present, with the State of Nevada probably rejecting the permit to supply us with the water needs. Where are we on Yucca Mountain?

Mr. Barrett. What we are doing at the moment is strengthening the scientific and technical basis for any future decisions. The next major decisions will be those of the Secretary of Energy, under the law, and we are strengthening the technical and scientific basis for those decisions. That is our major focus right now, and we are doing that.

We believe that, if the work turns out like we expect it to--of course, it is still not complete--we should have a sufficient basis to present to the decisionmakers, and under the Act that would be the----

Mr. Callahan. When did we first begin to study Yucca Mountain?

Mr. Barrett. The first scientific studies in that areas were in the '70s. The Act was passed in January of 1983, and under the Act we followed those procedures, so we have been working there over 20 years.

Mr. Callahan. How much money have we spent to date, approximately?

Mr. Barrett. About $4 billion in the Yucca Mountain area, and that would include monies to the State, but about $4 billion.

Mr. Callahan. And how much money is it going to take? When do you think the study will be complete?

Mr. Barrett. Well, under the Act, there are various steps and decisions. The next major decision would be, is the Department going to recommend the site to the President, and then will the President make the recommendation to the Congress under the Act.

Mr. Callahan. Based on your knowledge of the research, are you going to recommend to the President that he accept the site, based on preliminary indications?

Mr. Barrett. The science is looking promising, but we do not have it all assembled yet, but that is our working----

Mr. Callahan. How long do you have to assemble it?

Mr. Barrett. We are in the process of putting that together now, following the steps under the Act. So we must follow those processes, and our working schedule is to assemble that----

Schedule For Site Recommendation

Mr. Callahan. The process is, it must be submitted this calendar year, though, correct? To the President?

Mr. Barrett. The law does not say that, but that has been our goal for the past 11 years.

Mr. Callahan. Are you going to be able to meet that goal?

Mr. Barrett. We are working to do that. It is our goal and----

Mr. Callahan. Yes, but when do you think you will have sufficient data to make a recommendation to the President?

Mr. Barrett. This year we are preparing the information that we think will be sufficient. However, there are many other external folks, like the Nuclear Regulatory Commission, who must provide information. But, from our point of view, we are proceeding to assemble the scientific basis and our working schedule is to try to achieve it this year.

Mr. Callahan. Do you think you would be able to submit a license application in time to support opening of the repository in 2010?

Mr. Barrett. Our 2002 budget request before this committee is predicated on that. So if the science goes----

Mr. Callahan. What was your 1983 budget request predicated on?

Mr. Barrett. 1983?

Mr. Callahan. Yes.

Mr. Barrett. I would have to go back.

Mr. Callahan. When you first started.

Mr. Barrett. Well, the original Act had a goal of January 1998 for a repository. I think that as soon as the Act was passed most people who looked at the process that was spelled out in the Act, felt that it was not realistic that a repository could open in 1998.

The schedule changed in 1989, to the 2010 repository date, and there was debate in Congress about whether or not to have interim storage as there has been over the last couple of years. So the repository date has been 2010 since November 1989.

Mr. Callahan. So $4 billion in 20 years, and you still are not sure that you can submit to the President a recommendation by the end of this year?

Mr. Barrett. ``Sure'' is a strong term. I cannot say I am sure. We believe that is achievable and that is our working goal, but we cannot prejudge the scientific work.

Mr. Callahan. Well, it is getting hard to comprehend. Now, how far do we go? What is your contingency plan if Nevada is successful in denying the water permit?

Nevada Water Permits

Mr. Barrett. Well, there are different parts. If the site is determined to be unsuitable, either on technical grounds or political grounds, under the Act, then we are to report back to Congress within six months on a different path.

Mr. Callahan. Can you continue the study without Nevada's permit?

Mr. Barrett. That is the general process.

Mr. Callahan. Without the water?

Mr. Barrett. Now, regarding the water permits, following State law on water permits, we have applied and we have water permits until April of 2002, which is next April. The State has passed a law that Yucca Mountain is not in Nevada's public interest, and therefore the State Engineer has refused to extend our water permits per our request over several years for that period.

So we have taken that to court, in both Federal and State court, and that is now in litigation. We will have to wait to see how that comes out. If we do not have water at the site, and if we have no other ability to obtain water, and the State believes we would not, then we would basically have to stop the scientific activities at the site. We hope that will not be the case.

Mr. Callahan. And what is the contingency plan if they are successful in stopping it? What do you do? Do you continue to store the waste at the sites it is being stored now? Do you go to alternative sources? Do you begin another 30-year study?

Mr. Barrett. If we are blocked from getting water and we cannot continue the work at Yucca Mountain, then we would have to come back to Congress and, through the judicial system and through the legislative system, see how this Nation will go forward. If we cannot proceed with Yucca Mountain, then the material would have to remain where it is, unless this Nation adopts another path forward.

Mr. Callahan. Well, we do not have an alternative plan, though. I mean, we are just moving forward with this one site, disposal site. Is that correct?

Mr. Barrett. That is the law, and we can only follow the law.

Mr. Callahan. And when do you think the litigation in the courts, when will that be decided by the courts? Do you have any idea when the cases are----

Mr. Barrett. On the water permits, the State water permits?

Mr. Callahan. Yes.

Mr. Barrett. I cannot predict State and Federal court actions, so, no, sir, I do not.

Mr. Callahan. Well, what would you guess? I mean, would you think it would take five years or two years or two months?

Mr. Barrett. It will not be two months, is my understanding from the lawyers. It will take a substantial amount of time for that to be settled, and I do not know what the conclusion will be. It is a concern that we all have.

Mr. Callahan. Assuming that they win, what do we do then?

Mr. Barrett. If they win, and if we do not have water at Yucca Mountain, we cannot build the facility.

Mr. Callahan. All right. Then what do we do?

Mr. Barrett. Then we would have to come back to Congress and the Nation would have to develop another course of action on how we are going to responsibly manage our high-level waste and spent fuel.

Mr. Callahan. Some States might welcome this type of economy, if there is a good possibility that you can get the Federal Government to come in and spend $5 or $6 billion, pumping it into your economy, and then file suit, say, ``Well, you can't have the water.'' You know, a lot of States might like that $5 billion, if they are optimistic that they can stop it anytime they want.

Anyway, Mr. Edwards.

Mr. Edwards. Thank you, Mr. Chairman.

Efficiencies in Environmental Management

Dr. Huntoon, I have all the respect in the world for efforts to wring out efficiencies in government and think creatively, but I tend to think the cheapest way to suggest budget cuts in this process, and we have all seen this, is to say we are going to stop waste, fraud, and abuse. It sounds very courageous.

Now, you have been Assistant Secretary for Environmental Management from 1999 to 2001. I assume you did not have any category that said ``inefficiencies, waste, fraud, and abuse,'' did you?

Dr. Huntoon. No, sir.

Mr. Edwards. And I assume part of your responsibility during that time period was to try to find efficiencies, to spend the taypayers' dollars more efficiently. Is that correct?

Dr. Huntoon. That is right.

Mr. Edwards. Let me do this. You know, I think we all know what is happening here. OMB has directed DOE to reduce its budgets. OMB has the right to do that.

I would respect the process a little bit more if we had people testifying that said, ``Look, we are going to cut our budget, and this is what it is going to cost us.'' Instead we get testimony, not just from you today but others, where we are going to bring out unidentified efficiencies that are going to save this huge amount of money.

I would have more respect for the process if we had done the efficiency reviews and said, ``Okay, here is the identification of $460 million in waste, fraud, abuse, and inefficiencies.'' But to identify that we know there is $460 million in inefficiencies there we are going to correct, before you have even carried out the review, really raises credibility questions in my mind.

But let me just ask it in this way. I am going to just assume that OMB has directed the Department of Energy to reduce its budget, for whatever reasons. Let me ask it this way, so as not to put you on the spot.

Let us assume you are going to find, through this study, $460 million in waste, fraud, abuse, inefficiencies, and creative ways to manage and contract out. I hope you will. I will applaud you if you do that. Let us assume you do that.

Environmental Management Funding

What would you do with an additional $460 million, if we could keep your budget at last year's level, keeping in mind that still does not cover the cost of employee pay raises? What would you do with an extra $460 million in your budget?

Dr. Huntoon. Well, Congressman, there are several areas that we would deal with, I think primarily making sure that our highest risk efforts were completely funded. We have put challenges on several of those activities, at Savannah River and Washington State.

I would also look at putting money back into our science and technology programs, because I believe we have gained through the last few years from the science and technology efforts we funded many years ago, that are just now developing some technologies that are useful for us.

And I would work very closely with our environmental restoration, which are our lowest risk endeavors that we are not able to fund completely. I would work to get those funded more completely. We have some new technologies to try in those areas, and I would like to have the opportunity to apply those.

Mr. Edwards. I appreciate that honest answer. Could you have your staff spend a couple of hours, just try to, just in broad numbers, with some specificity as to which sites, give to the committee an answer to my question: How would you spend an additional $460 million if you had it?

[The information follows:]

Priorities for Additional Funding

The current President's budget places the highest priority on protecting the health and safety of our workers and the public and continuing work to mitigate high risks. Maintaining compliance is another priority, but will be challenging at a number of sites and require us to find efficiencies and work with our regulators to ensure that we are pursuing the most effective solutions to cleanup and compliance needs as well as the most appropriate sequencing of work.

If the Office of Environmental Management FY 2002 budget were increased by $460 million, there are several activities for which funding would be increased. First, we would fund cross-cutting items that would help meet commitments or complete work at specific sites. For example, we would examine the funding of additional TRUPACT's at the Waste Isolation Pilot Plant (WIPP) to support a greater number of shipments from Rocky Flats and Idaho. We would be in a better position to fund additional, high payoff science and technology efforts in the following categories: new basic research, the subsurface initiative at the Idaho National Engineering and Environmental Laboratory (INEEL), work with industry on new starts, and fully utilize the university system within the Department. In addition, we would be in a position to fund work that would help mitigate potential compliance challenges, such as shipment of the 3100 cubic meters of Transuranic waste from INEEL to WIPP. Finally, we would fund work that would support accelerated closure of sites, or portion of sites, such as the Hanford Site Columbia River Corridor Cleanup program. There are several other priorities that would be addressed, resulting in long term savings to the Department and the American taypayer.

Dr. Huntoon. Yes, sir.

Mr. Edwards. Thank you very much. Thank you both for your service.

Thank you, Mr. Chairman.

Mr. Callahan. Mr. Frelinghuysen.

Site Characterization Schedule and Costs

Mr. Frelinghuysen. Thank you, Mr. Chairman.

Mr. Barrett, good to see you again. I want to get back to some of the chairman's questions relative to the Yucca Mountain. I am not quite sure of the timetable. I get from reading your statement there is maybe, perhaps a higher level of optimism that actually some decisions are going to be reached in the near future.

You say, on page 2, ``Since the enactment of the Nuclear Waste Policy Act in 1982, our Nation has made a substantial investment in permanent geologic disposal. Almost $4 billion has been committed to the scientific and technical work for a geologic repository.'' And you go on to say, ``After nearly 20 years of cutting-edge science, our policymakers are very close to making a science-based decision.''

Is that an accurate statement? Are we very close? Your testimony is somewhat replete with, and it goes down, further down on that same page, ``Of these funds, more than 65 percent are devoted directly towards regaining momentum for license application activities.'' I mean, is something occurring here that has not been occurring over the last eight years? Is momentum building for a decision to be reached?

Mr. Barrett. There are several parts to your question, sir. Let me try to parse it a bit.

This budget is predicated on a decision that would be made about going forward with Yucca Mountain or not, and going to the license application phase. What we wished to be doing in our previous budget requests was to be preparing the site recommendation and preparing the engineering and science for a license application to the Nuclear Regulatory Commission, which is a very substantial task and the next major step.

Due to the budget reductions we have had over the last several years, over $140 million, which is a lot for our small program, we have had to defer a lot of that engineering and design work that we know we need to do regarding how to build the facilities and address the preclosure issues, not the thousands of years projections into the future. We have had to defer that work. So this year's budget would allow us to catch up on a lot of that work that had to be deferred, and that would be the acceleration part.

Regarding the decisions, we are putting together the scientific basis and sound science. We believe, based on what we have done to date, that we can do that, but there are other decisions by other groups that are not in our control, for example, standards are being developed by the regulatory agencies, and then there are decisions that must be made by the Secretary. He must be satisfied with the science. The President must also be satisfied. And then there is a political process. There are probably going to be legal processes. The State of Nevada has said that it will take various litigative measures, as well.

So we believe we have momentum in the program to complete the science and present this to the decisionmakers, and we are putting that together. So I am optimistic about it, but this is not a done thing yet.

SITE SUITABILITY

Mr. Frelinghuysen. In your opinion, is there any scientific or technical reason to think that a satisfactory geological repository cannot be built and maintained?

Mr. Barrett. I believe we can do that, but the standards have not yet been developed, and there are many other issues beyond just the straight technical aspect of it. I personally believe that we can assemble the scientific information to support an adequate geologic repository, but we have not done that yet, and we have to follow the processes.

Mr. Frelinghuysen. But we have spent $4 billion, and it certainly is in our national interest to have a single repository. The taxpayers might say that that level of financial commitment on their part should produce something, as well as obviously those that have contributed to those costs, those that are in fact suing, suing us. Is that right?

Mr. Barrett. Yes, sir, and we have done a lot. But this has never been done before, ever, so we are the first ones in the world to do this. This is a large endeavor, it is a very important decision, and we want to be very careful and be sure that we have the sound science and the basis for these fairly major decisions.

DRAFT EPA STANDARDS

Mr. Frelinghuysen. Have you made a final decision on whether to adopt the draft health and safety standards submitted by the EPA?

Mr. Barrett. Well, those are in process. We will comply with the final standards from the Nuclear Regulatory Commission which will be based on the Environmental Protection Agency standards. So there is not an option here. We will comply with those standards whatever they are.

Mr. Frelinghuysen. What is the timetable?

Mr. Barrett. Both of those regulatory agencies are working on those standards very actively, but I can't predict when that will be. I hope it will be fairly soon.

SPENT FUEL IN STORAGE

Mr. Frelinghuysen. It is my understanding, correct me if I am wrong, that spent fuel storage pools, there are such pools at 70 nuclear power plants in our country, and that these continue to fill up.

Mr. Barrett. Yes, sir.

Mr. Frelinghuysen. Nuclear power is going to continue to be generated. Do you know if there are any plans in place for new storage capacity at these sites? Obviously we are not going to reach any conclusion in the near future on Yucca Mountain.

Mr. Barrett. Yes, sir. Each nuclear utility has had to make provisions for our delay. The contracts provided for us to start moving fuel on January 31, 1998. Under the constraints of the Act, we could not do so.

So utilities have had to make provisions for either expansion of their pools or using dry storage to accommodate the fuel, to allow them to continue to produce electricity in this country. So, yes, they have had to do that, and we are proceeding as quickly as we can under the constraints within the law.

LITIGATION

Mr. Frelinghuysen. Could you comment briefly on the litigation issue in the latter part of your testimony? The U.S. Circuit Court of Appeals ruled in August of last year that nuclear power companies can sue you?

Mr. Barrett. Yes, it did. There are two major areas of lawsuits. Basically, there are 17 different lawsuits in the Federal Court of Claims, where various utilities have taken us to court for damages over our obligation to start moving fuel in January of 1998, which we were unable to honor. Those are winding their way through the legal system in a very complicated way.

We have engaged with all the contract holders to try to address the issue of being late and the additional impacts that that has had upon utilities, and we reached an agreement and a contract modification with one reactor site, PECO, which is now part of the Exelon Group. But that was an adjustment of charge, which was the only way we could do that under the contract, the only degree of freedom we had. Other utilities have taken the government to court in the 11th Circuit in Alabama, alleging that the Department did not have the authority to adjust charges because it would reduce the money flowing into the Nuclear Waste Fund. So that is also being litigated.

So those are the two major types of lawsuits that we are having to deal with at the moment.

Mr. Frelinghuysen. You are in court, but are you also negotiating?

Mr. Barrett. It was our plan to try to have other agreements like the PECO agreement. Since that is now being litigated, we felt it was best to delay that until we have some guidance from the courts. So we are not actively negotiating with any utilities at this moment, along the lines of the PECO settlement.

Mr. Frelinghuysen. Thank you, Mr. Chairman.

Mr. Callahan. Mr. Visclosky.

FY 2002 FUNDING REQUIREMENTS

Mr. Visclosky. Thank you, Mr. Chairman.

The chairman and others have talked about Yucca Mountain, and I guess I would want to ask it a different way. Your budget request was for $445 million, and as I understand the process, there is going to be a site recommendation. The President then needs to make a decision. Nevada has an opportunity to veto it, and then I would anticipate you will or not have congressional action, and I think I am correct in that assumption.

I also noticed in the answers you didn't give a date or a month or a quarter of the year in which the site recommendation would be made to the President, and I am not going to ask you for one. But my question is, as we continue to see slippage in this schedule, will you be able to use the full $445 million next year?

Mr. Barrett. I believe so, sir.

Mr. Visclosky. Why?

Mr. Barrett. Because there is a tremendous amount of engineering and design work for the surface facilities, for what we call the preclosure phase. We have had to defer that work. We have been wishing to do that work now for several years.

We need to do that catch-up work to design those surface facilities which will be required by the Nuclear Regulatory Commission, and all the safety analyses for the license application. So what has happened is, we have had to slip the license application date to 2003. It used to be 2002. We had to do that because given the '99, 2000, and 2001 budget reductions, we could not hold to that date any longer.

So if there is, let us say, a delay in the site recommendation decision, for whatever reason, we do need to first of all continue to strengthen the technical basis, if that is the reason for delaying the site recommendation, to try to get to a clear decision, a clear national decision either to proceed with Yucca Mountain or not on scientific grounds, and we need to reach that decision. And then, if the decision is to go forward, we need to prepare the deferred work on all the designs of those facilities. These are complicated, billion-dollar facilities.

Mr. Visclosky. So those items would be separate from that decisionmaking process and would have to be completed in any event?

Mr. Barrett. Yes, sir.

TRANSPORTATION SAFETY

Mr. Visclosky. Okay. I represent a district that is at the southern tip of Lake Michigan, and if you want to go around Lake Michigan any way but through the air, you have to travel physically through the First Congressional District.

And between 1964 and 1997 it is my understanding you had 2,426 highway and 301 rail shipments of spent nuclear fuel in the U.S. From '57 to '99, Naval Reactors Program shipped 719 cask loads. And since 1999, over 100 shipments of transuranic waste have been made to the WIPP facility.

How has our record been as far as transportation? Because I am sure mine is not the only district where it would be an issue. And in a sense I am wondering, as we look forward to the use of Yucca Mountain, we will traverse many States and many congressional districts getting the material there. Is there a weak link that we are not paying enough attention to, as far as then some day transporting the waste, that we should be paying more attention to?

Mr. Barrett. The transportation record, both in the United States and worldwide, is exemplary and outstanding from a safety point of view. From a risk point of view and a safety point of view, there is not much to compare to that. So from a technical safety point of view, I do not think there is much of an issue here.

However, from a public perception point of view and a public interest point of view, it is a significant matter. It is a significant matter to every political jurisdiction that might have nuclear material transported through it.

So we have plans. It is in the Nuclear Waste Policy Act to work with State, county, and local governments and support them, both financially and with technical assistance, to accommodate those shipments and deal with the shipments. So we know this will be a major item.

What we have had to do with past budget cuts is defer that work, again to concentrate on the primary decision: Is the mountain suitable for recommendation to the President or not? In the 2002 budget request, we are basically doubling the transportation budget to $6 million--it is less than $3 million today--to plan those logistics and to work with all the jurisdictions to prepare for transportation.

Mr. Visclosky. I appreciate knowing that. Obviously you have other fish to fry here, but I do not think it is too soon, and I do not think people can be aggressive enough or forthright enough, because we have had a number of controversies in my district, unrelated obviously to this program, but not handled well from a public relations standpoint. It is going to be unpopular, and I would encourage people to go into this with a positive and affirmative attitude, to intervene early as far as education.

ENVIRONMENTAL MANAGEMENT FUNDING

As far as the environmental management budget, we have a reduction of $354 million, and I understand again some questions have been asked. My question really is, besides just the reduction off of the current year level, the budget also includes new responsibilities for the environmental management program: $125 million more for the Portsmouth plant in Ohio, the transfer of uranium programs from a different part of DOE.

Given new responsibilities over current service levels, what is the real reduction, if I could, in this year's environmental management budget?

Dr. Huntoon. Well, Congressman, I cannot add it up right now for you, but we did have the addition of the new work in our program that had previously been in the nuclear energy program, so that would be maybe a couple hundred thousand dollars. I do not have my----

Mr. Visclosky. Give that to us for the record.

Dr. Huntoon. We will get it for you for the record, but these programs are funded. We are undertaking these new programs, in the earliest planning stages, to meet our obligations at Portsmouth as well as the uranium programs. So, yes, those are additional. That is additional work to our program, and I will get you the exact numbers.

[The information follows:]

Actual Reduction in the Environmental Management Budget

The Environmental Management FY 2002 budget request is $5.912 billion, a reduction of $355 million from the FY 2001 budget. There are numerous projects and accounts that have changed from FY 2001 to FY 2002. For example, the FY 2002 budget contains projects with scope increases, such as the $125 million increase for Portsmouth and the $123 million increase for the Waste Treatment Project at Hanford. However, other projects have had scope decreases including the uranium/thorium account, which decreased by $70 million.

Mr. Visclosky. Because I just want to make sure the record is established, because I do think you have a very important program here. I would admit to you that prior to becoming the ranking member of this subcommittee, even as a member of the subcommittee, this was kind of an amorphous issue that was going to be there forever, and so it was an easy pot of money to go after for other programs.

My attitude has substantially changed, not only because of the force of litigation, but I think public responsibilities here. So I do think it is important that there be a public record as to what the implications of the budget are.

And for the record, if I could, but if I could just read these, I would appreciate also if you could characterize for us the percentage reduction in soil and groundwater cleanup that this year's proposed budget would mean; also the same percentage for contaminated building destruction; as well as the impact as far as the DOE's plans to accept approximately twice as much transuranic waste for next year.

And I thank you, Mr. Chairman.

Thank you.

Dr. Huntoon. Thank you.

Mr. Callahan. Mr. Wamp?

Mr. Wamp. Thank you, Mr. Chairman.

Dr. Huntoon, I want to first thank you for sticking with these responsibilities from one administration to the next. It has been difficult enough, over the last six and a half years since I have been around, to keep an Assistant Secretary for Environmental Management on the job.

I think it is true that there have been more days in the last six and a half years with an Acting Assistant Secretary for Environmental Management than there have been with a permanent Assistant Secretary for Environmental Management. And God bless Al Alm's soul, when we went from a 70-year goal to a 10-year goal and then back into midair with really no goal, this position and these responsibilities have been somewhat up in the air ever since then.

And so we do need some permanency and we need some stability. We do need the top-to-bottom review, but I want to identify myself with the comments of the chairman and Mr. Visclosky and Mr. Edwards, as well, to try to get to the finite point of determining, versus some arbitrary figure--whether it is an increase, a decrease, level funding, those are all basically arbitrary--I need the finite number on what it takes to meet the compliance agreements and what the schedule is in this administration to come to that outcome.

SCHEDULE FOR ENVIRONMENTAL MANAGEMENT ASSESSMENT

For instance, I understand there is a meeting scheduled or there will be, between Secretary Abraham, Administrator Whitman, and the governors of the States that have sites in their States. And I would like to know what is the time frame of that meeting, when that expectation is, and then what is the goal for completing the top-to-bottom review, and how will it coincide with this subcommittee's responsibilities to mark a bill up sometime over the next 70 days.

Dr. Huntoon. Yes, sir, Congressman Wamp. We are developing that schedule right now and trying to arrange the meetings that are going to occur, so I suspect in the next month or so we will have some of those meetings, and we will get back to you on the exact dates because the dates have not been set for those meetings.

The top-to-bottom assessment I think is going to take some time, but we are hoping to get some initial reports to the Secretary in June, and then I believe that the new Under Secretary and my successor will both be in place, and we will be able to assess the data that we are now collecting for them so they can make recommendations to Secretary Abraham about where we might do business in a different way, in a more efficient way, and gain some resources out of the review.

Mr. Wamp. The top-to-bottom review over in DOD under Rumsfeld I think is expected to generate a possible supplemental request at some time during the year for the military. Do you anticipate that if this top-to-bottom review of environmental management and the needs and the reforms that are necessary, once those are identified, is there a possibility of a supplemental request?

Let me ask this additional question. The reforms recommended, if there is a gap between those reforms and meeting the compliance agreements, will you come back to us in a timely manner for an additional request for the funding so that we can, as the chairman said, meet the minimum levels of funding necessary to meet the compliance agreements?

Regardless of the reforms, we have got it coming at us from both sides. You know, we need the reforms to take place, but the compliance agreements are not going to go away just because we are waiting for the reforms.

Dr. Huntoon. I understand that. One of the dangers in going and asking questions is, as you know, when you do not know the answers, they could come out either way. We are going to be looking for efficiencies, but we might however find areas where we do not find efficiencies, in fact we may find things that cost more money. When you ask questions, you get answers you cannot predict. So I am not going to sit here and tell you that we are not going to find areas where more money might be needed.

But our plan is to look for efficiencies by looking for roadblocks that DOE through the years has put into place so that contractors cannot operate as efficiently as they would like. We hear that often, I am sure you all have heard that if DOE would get out of the way, the contractors could do a better job. Well, we are going to ask them to be specific with us, see what they are talking about. Those are the kinds of things that we hope will get the efficiencies that we are looking for.

POTENTIAL COMPLIANCE LITIGATION

Mr. Wamp. How many lawyers are at DOE right now that would have to be put to work in the litigation that would ensue with the States if these compliance agreements are not met, if we do not adequately fund that? I mean, I know everybody in the room is laughing. How many lawyers are there? How many lawyers are we talking about here?

Dr. Huntoon. Well, I was going to say too many, but then I am afraid I will get in trouble if I say that. I don't know how many.

[Laughter.]

Mr. Callahan. Let the record say that it is not too few, though, is it?

[Laughter.]

Dr. Huntoon. You know, my son-in-law is a lawyer, so I have to be careful.

There are a lot of lawyers over there, and I am sure they will be busy. I do not know the number, but I can get that number for you.

Mr. Wamp. As one member of the subcommittee, I would hope that you keep us out of as much litigation as possible. With the budget request and with our ultimate spending levels, I hope we can come to agreement on this, because I think there is bipartisan support for that on the subcommittee.

Dr. Huntoon. I could not agree more with you. We do not want to go to litigation on these issues, and in the majority of the cases I do not think that is an issue. We need to sit down--and we have done this in some cases, by the way--with our regulators, with the EPA, with the State people, with the people that live in the areas around the complex, and talk about whether or not are we approaching these things in the right way.

We have had good luck doing that at Rocky Flats. The community has come together, and the regulators have come together with the contractor and DOE. We have made some decisions to let the contractor schedule their work as best they can to get it accomplished, as opposed to according to milestones, as an example. And we need to go sit down around the complex and do that with our regulators.

Mr. Wamp. One thing in closing that Mr. Visclosky will appreciate. For instance, in Oak Ridge, there is nothing that creates more concern in our community than compliance agreements not being met and environmental management responsibilities not being met, especially on the heels of us identifying and coming to grips with the fact that some of our workers were exposed to nuclear materials as the Cold War legacy built up, and now we had to come up with a program to compensate those workers. And that, coupled with environmental funding cuts, it is a back-to-back problem in communities where these sites exist.

And I want to thank Jeanne Wilson on our majority side, from our staff perspective, for really taking a personal interest in these programs and the environmental responsibilities that go with this subcommittee's actions, and being a real professional throughout the years. And I yield back.

Mr. Callahan. Mr. Pastor.

Mr. Pastor. Thank you, Mr. Chairman.

Good morning. I will probably concentrate on the Moab site, but as I was sitting here and realizing that we are not going to cut the ribbon at Yucca Mountain soon, I thought I would ask this question.

POTENTIAL FOR FUEL REPROCESSING IN THE U.S.

In Europe we have facilities that have taken the spent fuel and reprocessed it, and about three-fourths of them are pretty inert, and the remainder is recycled. Now, is that a possible alternative that we need to look at? What are the problems, pro and con?

Mr. Barrett. The fuel cycle in the United States is a little different from that in Western Europe. Basically, France and Britain have invested in a reprocessing plant, where the reactors in those countries and also other overseas countries, such as in Germany and Japan, send fuel there to be reprocessed, and high-level waste is turned into glass, and plutonium is separated and can be recycled into mixed oxide fuel.

The United States chose not to pursue reprocessing back in the '70s. There were political issues as well as economic issues here in the United States. So you have basically different systems, but both systems still produce high-level waste that must be responsibly managed and placed somewhere.

Mr. Pastor. Right.

Mr. Barrett. So, the end result is the same, and there are repository programs, some faster, some slower, in Europe, and France has a program similar to what we have in the United States. But that does not solve the problem. You still need a repository, whether you have reprocessing or not.

Mr. Pastor. Well, in some cases on the site where they reprocess these spent fuels, they are able to store them because the amount diminishes in size quite a bit.

Mr. Barrett. Yes.

Mr. Pastor. But let me ask this question to your response. Is the technology there? I mean, we are talking about technology that was used 20 years ago, that was developed 20 years ago. Has the technology advanced itself, where the type of fuel we use here could be recycled and reprocessed to make it inert and to continue to recycle it?

Mr. Barrett. Yes, the reprocessing technologies have advanced, and there are many more advanced technologies than what is available today in Britain and France, which copied our Savannah River and Hanford reprocessing here in the United States, which were developed back in the '40s. But you still have a repository you have to deal with.

In the United States we do not have an interim storage facility. Overseas those reprocessing plants act like interim storage facilities because the fuel is sent there and it relieves the pressure on each of the individual reactor sites. But we don't have that in this country.

Mr. Pastor. Well, I know that, because in Palo Verde we are running out of space.

Mr. Barrett. Yes, sir.

Mr. Pastor. And so we have to find a solution. Yucca Mountain is one solution we looked at. But we have been at it now for, what, 10 years? At least I have been on this committee for 10 years, and we have been discussing it.

And so I said, well, if that is not going to happen, we are not going to cut the ribbon at Yucca Mountain, is there another alternative? And the alternative would be, how do you make that radioactive spent fuel inert, as much as you can, and then recycle what is left?

Mr. Barrett. It is not really an alternative. You still need a repository, and you still have residue from reprocessing, so it is not an alternative to Yucca Mountain. It is another step.

Mr. Pastor. Yes, I agree with you, but what I am telling you, right now we have acres of rods under water in Arizona, and I would think that a logical solution would be, take as many of those rods and reprocess them somewhere and make as much of it inert, which you reduce from say 100 tons to 75 tons are now inert that you have to store, but it is easier to store 75 tons as compared to 100.

I know you are going to have to deposit it somewhere, but if Yucca Mountain is not going to be the site, maybe in Phoenix at Palo Verde we could take the 75 tons of inert material, as much inert as it is, and store that there, you know. But I think we should start looking out of the box.

Mr. Barrett. It is complicated and a big national policy decision to go to reprocessing, even with advanced technologies, but it is a possibility, and it certainly could assist. But it will never replace a repository, nor is it an alternative to one.

MOAB SITE

Mr. Pastor. My other interest, Mr. Chairman, is the Colorado River. We receive water downstream from the Colorado River, and we are very concerned about the Moab site, as well as the Californians. Have you detected any radioactive material in the water south of the site?

Dr. Huntoon. No, sir, we have not detected any material from the site in the water. What we are concerned about is that over time, leaching of the material will occur at the Moab site and will get into the river. We have not detected radioactivity.

Mr. Pastor. Last year we programmed, I think, $2 million to start looking at the Moab site activities. Are we going to continue with that reprogramming of the $2 million, or where is----

Dr. Huntoon. The reprogramming was submitted by the last Administration, and I think the current Secretary is sending a letter. It is my understanding we are sending a letter up to support that reprogramming, so it can proceed, to have the money to do the initial studies that we need to do.

Mr. Pastor. How much money did you request in this year's budget?

Dr. Huntoon. There was none requested this year because we need to do the planning for the work on this. There is some money that we have available to do surveillance out of our Grand Junction office. When this reprogramming comes through, we will use it for the planning so we can come forward and ask for the right amount of money to remediate the site.

Mr. Pastor. What do you think the Federal role is going to be in this? Are we just going to study it? Are we going to go in and clean it up? Where do you think we will be eventually?

Dr. Huntoon. Well, it is our intent, if approved, when we get the reprogramming done, to put a plan in place and go in and remediate the area. It is, as you know, about the size of a football field, and quite a few tons of tailings that need to be moved from there. That is going to take several years to do. But that would be the current plan, if approved.

Mr. Pastor. I will yield back, Mr. Chairman. Thank you very much.

Mr. Callahan. Mrs. Emerson.

Mrs. Emerson. Thank you all very much. A lot of my questions have already been asked, but let me just turn to a couple of things, if I might.

HAZARDOUS WASTE TRAINING

Dr. Huntoon, when you talk about safety first, as you do in your prepared testimony, I know that the Department of Energy has funded programs in the past to provide training for its workers so that they can participate, and/or for contract workers to participate in the cleanup of hazardous waste sites. I think the budget last year was about $8 million, if I recall correctly, and this year the budget request is just for $1 million.

And it occurs to me, with all the work yet to do, that a $7 million cut is fairly drastic, considering the fact that this is very hard work and certainly you get burned out, I don't mean that literally, but burned out very easily on that. Can you explain to me why that cut has been made?

Dr. Huntoon. Well, as you know, we had some tough choices to make in getting the budget together with the numbers that we had. The reduction you are talking about I think is in the hazwoper area, where we decreased it from $8 to $1 million request.

That is not the only training funding in Environmental Management. Just about every contract and every site has ongoing training. This was a particular kind of training that had required facilities and that sort of thing. We are hoping we will be able to continue that, and as people need to send their workers for that training, they will be able to supplement it with money from their programs.

Mrs. Emerson. So, in other words, you are saying that perhaps you can make up the deficit by redirecting monies for other training to that specific----

Dr. Huntoon. Well, I think that is an assessment that needs to be made, because I know a lot of training is going on. Every site has training going on. The hazwoper training is a particular kind, and a very good training, and so I think they are just going to have to make some assessments on that.

Mrs. Emerson. So will you do it as you go along, or how will we really know workers are receiving the appropriate training they need to do this work?

Dr. Huntoon. Well, I can tell you workers will receive the appropriate training because that is required to be able to do the work.

Mrs. Emerson. Okay.

Dr. Huntoon. I think the assessments that we are doing over the rest of this spring and summer are going to help us in aligning our training facilities and the money that we are putting into them. We are making sure that they are adequately funded and that the workers are subject to the right training, as part of an assessment that has got to go on.

Mrs. Emerson. Okay.

Mr. Visclosky. Would the gentlewoman yield for a second?

Mrs. Emerson. Yes.

Mr. Visclosky. I would just want to emphasize that I appreciate your line of questioning and do support you in it. I am very concerned about this.

Mrs. Emerson. Yes, and considering the fact that I have many constituents who have worked at your Paducah facility and are having problems now, I am very concerned about the training and the need to do appropriate training and rigorous training. And I realize that a lot of people have been trained over the years, but I cannot imagine the longevity on this type of job would be particularly great.

Dr. Huntoon. Well, and the training needs to be refreshed, too.

Mrs. Emerson. Right.

Dr. Huntoon. It is not something that you just get one time. It is an ongoing thing during a person's career in this field.

PACE OF PROGRESS IN NUCLEAR WASTE DISPOSAL

Mrs. Emerson. Let me ask you one more question, if I could, and it really has to do with a nuclear plant in my State of Missouri, and that is the Callaway plant. Since about 1983 our consumers have committed about $169 million into the Federal Nuclear Waste Fund so that they would be able to help finance nuclear waste management beginning back in 1998, but nothing has happened since that time.

And I suppose I am asking for some words of comfort, if you will, for my Missouri consumers with regard to the electricity from nuclear power plants and what is perhaps a perceived failure on the part of the government to dispose of their waste. What do I tell them?

Mr. Barrett. I believe you could tell them that Secretary Abraham cares very much about this program, and we are proceeding as fast as we can under the processes prescribed by law. So we are proceeding to make these decisions as quickly as we can.

Mrs. Emerson. So I cannot tell them a specific date when the truck is coming. Is that right?

Mr. Barrett. I could not give you a date, ma'am.

Mrs. Emerson. Okay. Well, I would be very anxious to learn about this. And I believe, to be honest with you, that we are having a little bit of difficulty with one particular person at DOE, and the whole truck route, et cetera.

But I would certainly appreciate it if you all could look into this for me and get back to me, because it is of great concern. And even though I do not represent that particular district, it is very close to mine and I certainly have constituents who use the power generated from that plant. Thank you.

Thanks, Mr. Chairman.

Mr. Callahan. Mr. Clyburn.

Mr. Clyburn. Thank you, Mr. Chairman.

I thank both of you for being here. I think I recall earlier that one of my colleagues mentioned the length of time or the amount of time that we have had the Acting Assistant Secretaries as opposed to Assistant Secretaries. I want to say, doctor, that that is not always a negative, because I think that you have served almost three years as Assistant Secretary and you are now in an acting capacity because of the nature of the game that we are all involved in here. But I think this is a real positive here for you to be able to stay on and help with the transition, and I think I congratulate you for that.

SAVANNAH RIVER SITE

When Secretary Abraham was here some time ago, I raised with him my concerns about the safety issues at the Savannah River site. Of course, there are a couple of thousand jobs, as well. But this budget cut in the environmental management area seems to be somewhat of a threat to safety, to me.

And I would like some ideas from you as to how we could go about, with this administration, fulfilling the kinds of, if not commitments, certainly plans that you had a year ago for the Savannah River plant, and what this budget cut is going to do to those plans, and maybe something about what are the alternatives. Are you going to postpone something, are you going to cancel something, or what is it that we can expect to maintain safety in an area that is very, very highly populated?

Dr. Huntoon. Well, I would like to say that, as I said in my opening remarks, I have emphasized safety in the environment, safety for the workers as well as the people in the communities, as our number one priority to our middle management in the period of time that I have been in this office, and I still think that it has to remain our first concern. So the safety of the workers and the processes that we do will remain the number one priority, and we have funded all of the safety in that area.

The things that we are going to have challenges on at Savannah River are the lower priority environmental restoration activities. We are not going to be able to proceed as rapidly as we wanted to in some of those areas. We are not going to be able to do decommissioning and decontamination of some of the facilities so that we can close them as rapidly as we wanted to. We need to do that across the complex, not only to get rid of them but to reduce the cost of maintaining facilities. So that has been something that we want to do. We are going to have to postpone that under the current budget.

But we are accomplishing quite a bit down there, and I think the high-level waste that we are processing and the canisters that we have made for storage and all shows that we are making a lot of progress down there. That is a very difficult procedure, as you know, the vitrification, but we are doing that, and I think that is to be commended.

The other thing is, we made our first shipment out of Savannah River, to the Waste Isolation Pilot Plant in New Mexico on the 8th, which was what, yesterday?

Mr. Clyburn. Yesterday.

Dr. Huntoon. Yesterday the first truck load of TRU waste left Savannah River, and that was a real milestone, as you know, to open that southern corridor and get that shipment out of there. I think that was a promise we had made to the people of South Carolina, that we would not just keep bringing stuff in there, that we would try to get some of it out, and so this is the first shipment of that.

We also are going to continue the work on the spent fuel and everything else that we had committed to do. The Defense Board knows we are doing this. We are working with the two canyons, to process materials that were on schedule to be processed, dangerous materials that need to be dealt with. That is all being done.

And, as I mentioned, the things that are not being done were the lower priority things, but things that we still feel strongly about. We are just going to have to take some challenges and look for efficient ways to do them.

Mr. Clyburn. Do I understand from that answer that you are certain that these innovative technologies at Savannah River have significant payoffs? Is that----

Dr. Huntoon. Yes.

Mr. Clyburn. That is the extent of it?

Dr. Huntoon. Well, the innovative technologies have been paying off for us down there. I think some of the work with the groundwater and the diversions that they have put in and all have really proven to be good, and of course we still have some time to go on those to make sure. But I think they have been using innovative technologies, and particularly in the restoration area, and a lot of those will continue. We just will not be able to start many new ones.

Mr. Clyburn. Thank you, Mr. Chairman.

Mr. Callahan. Mr. Doolittle.

NUCLEAR FUEL REPROCESSING OVERSEAS

Mr. Doolittle. Thank you, Mr. Chairman.

Mr. Barrett or Dr. Huntoon, whichever one of you cares to answer, I just want to follow up on Mr. Pastor's question. I understand that France reprocesses 85 percent of its nuclear material. That would be a great cost reduction, I should think. I would hope that we might embark more seriously upon our nuclear program now for energy production in this country, and I just would like to ask, is it not time to revisit the decision that was made in the '70s not to allow reprocessing of this fuel?

Mr. Barrett. I believe that with Mr. Cheney's report coming out soon, there might be some national discussion about that.

Mr. Doolittle. Well, I am encouraged to hear that, because I was noticing at one of these facilities, maybe it was Hanford, there is like 2,000 tons, I think, of spent nuclear fuel, and an 85 percent reprocessing of that would be a substantial erosion of that backlog.

Mr. Barrett. It is a very complicated issue, but it is possible.

Mr. Doolittle. Well, of course it is possible, because there are nations doing it. And yes, it is a complicated issue, but it is an issue that I would hope that we would look at. I mean, it is not like it is some bizarre theoretical possibility. It is done all the time in some countries, right?

Mr. Barrett. Well, the 2,200 tons of fuel at Hanford was weapons production fuel, so that is complicated. That is not power plant----

Mr. Doolittle. So you are speaking of that specifically? Okay.

Mr. Barrett. Yes. That particular fuel is rather special, given nonproliferation considerations globally. But, in general, recycling or reprocessing of power reactor fuel is a possibility. It is a matter of economics and the price of uranium and the future projections on nuclear energy and those sorts of things. So, yes, it has a very complicated economic and policy aspect to it, but it is certainly one that I expect will be discussed in this country.

Mr. Doolittle. And the power reactor fuel does not lend itself to the production of weapons?

Mr. Barrett. If you recycle fuel from present day power reactors, as opposed to advanced technologies decades in the future, the process produces plutonium that is called reactor grade plutonium. It is weapons capable. It is not as usable as, say, weapons-grade plutonium, but nonetheless, there are nonproliferation concerns about separated reactor grade plutonium.

Mr. Doolittle. Okay. Those are the concerns that were present when they made the decision in the '70s. Is that right?

Mr. Barrett. Initially, it was global nonproliferation, but then economics kicked in during the Reagan Administration, so it is a combination of policies and economics on reprocessing.

WASTE TREATMENT AND DISPOSAL

Mr. Doolittle. Okay. I just picked up--I do not know very much about this, but then I figure I will learn as I sit here in this committee--this idea of vitrification. Is that a relatively recent process that some of these materials have been subjected to?

Dr. Huntoon. I do not know the exact history of when vitrification started. We have been doing it for a number of years. It is a process whereby high-level waste can be made into a safe form for storage by making it glass, putting it into glass and pouring it into cylinders, and we are doing that.

We have done it quite successfully up at West Valley in New York. We are doing it very successfully right now at Savannah River. And the plant that will be built in the next five or six years out in Washington State will have that as the main way to make that waste in a safe form, where it can then be stored.

Mr. Doolittle. So in storage there is two issues. You sort of do what you can to stabilize it. I guess vitrification would be that. And then you put it someplace. Is that right?

Dr. Huntoon. That is right.

Mr. Doolittle. Now, in the WIPP facility, do you vitrify the material before it goes in there?

Dr. Huntoon. No. The WIPP facility has transuranic waste, and that is waste that contains plutonium and higher contamination. That waste, how we prepare that waste to go down to WIPP is very much prescribed by the State of New Mexico and the EPA, as they have required us to examine the waste, to know exactly what goes in each can. We do that, make measurements, gas measurements in the head space of the tank, quite a few permit-prescribed procedures.

That waste can be as little as a plastic wrap that someone used on a table. It can be boots that were walked in. The transuranic waste has contaminated the materials. It can be dirt, if you will. So it really varies in what it is.

Mr. Doolittle. But it could be plutonium, too?

Dr. Huntoon. Very low, the lower levels.

Mr. Doolittle. Okay, so the WIPP is for the lower level stuff?

Dr. Huntoon. That is right.

Mr. Doolittle. And Yucca Mountain, what is that intended for?

Mr. Barrett. Yucca Mountain is for the higher level.

Mr. Doolittle. That is the higher level?

Mr. Barrett. That is correct. That would be the spent fuel or the glass. If the fuel from a reactor had been processed, as much of the fuel at Savannah River and Hanford was reprocessed for national security reasons since the 1940s, and in West Valley, New York, as Dr. Huntoon mentioned, which was a commercial reprocessing plant that operated in the '60s and '70s and was closed in the mid-1970s. The residue that was left over, gets turned into glass, or vitrified. Either of those materials, spent nuclear fuel or high-level waste, would come to Yucca Mountain, which would be a high-level waste facility.

Mr. Doolittle. So the vitrification process is used, is applied to the higher grade, more serious material. Is that right?

Dr. Huntoon. It is applied to waste materials. It is liquid waste----

Mr. Doolittle. The actual waste itself, as opposed to----

Dr. Huntoon. It is liquid, that is right. It is liquid waste that came out of the processing in these very large chemical processing facilities to get the plutonium.

Mr. Doolittle. And right now, I guess, don't the nuclear plants just store all of this material there on site? Is that how it works?

Dr. Huntoon. The high-level waste is in DOE facilities. It is----

Mr. Doolittle. Oh, so they ship it to a DOE facility?

Dr. Huntoon. No, it is waste that was created at these facilities.

Mr. Doolittle. Right, okay, the high-level waste. But the nuclear power plant waste from the existing plants is stored on site there?

Mr. Barrett. It is stored at each of the 70-odd nuclear power plant sites until the Federal Government can create a facility to discharge its obligation. So, yes, it is stored until we are ready to take it.

Mr. Doolittle. So that facility could either be a reprocessing one, if that is the way we decide to go, or would it conceivably end up in either Yucca Mountain, if it is ever built, or in WIPP?

Mr. Barrett. Well, again, under the statutes, we do not have a central storage facility in the United States, and that is a matter of United States policy. So, at Yucca Mountain, we are seeing if that site will be suitable for a geologic repository. We do not have an interim storage facility for the commercial nuclear power waste, so it remains on site until we create a place for it.

Regarding the WIPP, that is by policy, by law is for transuranic waste, which has a lower level of toxicity than the high-level waste. That is for the defense materials, and that is only as a matter of law. But it is salt, which is a medium that could be used for high-level waste, but it is not.

GLOVE BOXES

Mr. Doolittle. I read about plasma arc cutting as a way to cut up buildings, I guess, at I think it is Rocky Flats, into glove box size reductions. A glove box I think of as being the thing in the car where you throw stuff into. What do you mean by a glove box?

Dr. Huntoon. The glove boxes are contained mechanisms to protect the worker and the environment from the radiation. If you would think about having your hands fitting into gloves so that you can work inside a box, and the insides of these boxes are all contaminated, and that is how the work was done across the complex to assemble weapons or disassemble them, or sort procedures, chemicals as they came in or what have you, and they are all very contaminated.

Mr. Doolittle. So those would be about, I do not know, like give me a rough dimension of a glove box.

Dr. Huntoon. Some of them are the size of this table, or larger.

Mr. Doolittle. Okay, and this plasma arc cutting business, is that some advanced way to cut through----

Dr. Huntoon. That was one of the technology advances that we used, because they have to be cut in pieces that can then go into the containers that go to the Waste Isolation Plant down in New Mexico. And so in order to get these in sizes that can be managed, because they are so large, they were being cut. Of course the workers had to cut them with special garments on and all, so they would not get contaminated. The plasma arc does it very rapidly, and so it has reduced greatly the amount of time it takes to process those.

Mr. Doolittle. Now, do those garments then go to WIPP as well?

Dr. Huntoon. Yes.

Mr. Doolittle. So every time----

Dr. Huntoon. When something is contaminated with transuranic waste, that is where it goes.

Mr. Doolittle. Okay. Well, thank you very much.

Dr. Huntoon. You are welcome.

Mr. Callahan. All Members will have--we are expected to do it in a timely fashion--time to submit questions. I will have 15 pages of them myself, of course. [Laughter.]

FUNDING FOR STATES

But in the interim here, briefly, how much money are we spending in the WIPP program that Congressman Doolittle was talking about? And even more specifically, how much in New Mexico, and for projects other than those directly related to the facility, such as transportation or highways?

Dr. Huntoon. Mr. Chairman, the WIPP budget for 2002 is $165 million, and I believe $20 million of that goes to the State.

Mr. Callahan. $20 million to do whatever they want to do with it, or----

Dr. Huntoon. Well, they are providing support by highway support and police and safety and that sort of thing, to make sure that the shipments are coming in correctly.

Mr. Callahan. Along the same lines, I know that we were giving money to the State of Nevada, that we found out they were using actually to lobby against the Yucca Mountain project. And then we stopped it in 2000. We reinstated it partially in 2001. And who is monitoring that? What are they doing? How much money are we giving to Nevada? Or now I guess it goes through their emergency management program.

Mr. Barrett. In 2001 it is $2.5 million.

Mr. Callahan. So you gave them $2.5 million?

Mr. Barrett. Correct.

Mr. Callahan. Which is a contribution that no other State gets for their emergency management operation.

Mr. Barrett. Well, the purpose of those funds is to perform scientific oversight of this program, so it is directed toward that. They cannot----

Mr. Callahan. Has anyone audited that to see how it has been----

Mr. Barrett. Yes, sir. That is done under the Uniform Federal Auditing Act, and yes, audits are performed. An audit was performed in '99. A small amount of funding was provided in '99. I think it was $250,000.

Mr. Callahan. So essentially what we did, we told Nevada we were going to stop giving them the money we were giving them because they were using it for lobbying activities against the project. So now we are funding their emergency management organization to the tune of $2.5 million, when the government of Nevada now is able to go to the legislature and say, ``Now that we have taken care of emergency management needs, something that would be our obligation under normal circumstances, it frees up money. You give it to me for a special project, whereby I can lobby against Yucca Mountain.'' Is that right? Is that a correct assessment?

Mr. Barrett. I cannot assess----

Mr. Callahan. I understand that, but we discovered that they were misusing, in our opinion, the monies we were giving them, to lobby against the project, so we cut it out. And then we went back now and we have given them $2.5 million and said, ``This is money for Yucca Mountain, so you can take money that you are spending on something else and put it over here and lobby against the program.'' I mean the Yucca Mountain program.

Mr. Barrett. The money that is provided under the law is to be used for oversight of Yucca Mountain, under the Yucca Mountain program. That is independently audited by the Unified Federal Auditing team, which, I believe is the part of the HHS that audits all the Federal grants that go to Nevada, be it schools or whatever. So it is audited. I do not know if 2000 has been audited or not. I doubt that 2001 has. But there are certifications required from the State and audits will be done.

Mr. Callahan. There was not much money in 2000, I do not think.

Mr. Barrett. I think it was very small. My recollection is it was something like $500,000, a very small amount, but in 2001 it is $2.5 million.

ALTERNATIVE TRANSPORTATION PLANS

Mr. Callahan. How about the transportation problems? You also anticipate the roadblock. That is not a pun, but a transportation problem, an alternative transportation route. Do we have any contingency plan for a transportation route to eliminate the traffic from the City of Las Vegas?

Mr. Barrett. If we build the facility at Yucca Mountain, it will require a fairly major transportation infrastructure within the State of Nevada. Our preference for transportation of the spent fuel would be by rail, but there is no rail line at the Yucca Mountain site now. We would like a rail line to be built, or potentially a heavy haul road like they use in France instead of rail, to move nominal----

Mr. Callahan. Is your Department prepared to make the necessary transportation decisions rather than leave them to the State of Nevada?

Mr. Barrett. If it turns out that Yucca Mountain under law is designated the site, we would hope to have cooperation and work with the State of Nevada to select a route that works for both parties, and not make it unilateral from one or the other. We will have to cross that bridge when we get there.

But before a recommendation is made and a policy decision is made, I think it is premature to get into detail on routing. We have evaluated five different routes in our environmental impact statement, and if the site is duly designated under law I believe we can work that out at that time with the State of Nevada.

Mr. Callahan. You know, I could go on, but since I am going to have to submit 15 pages anyway, I might as well submit all the rest of my questions. I don't know if the committee thinks we have time to finish this before the vote or not.

Mr. Edwards. I have no questions.

Mr. Callahan. You have no questions. Any questions?

Mr. Frelinghuysen. No questions.

Mr. Callahan. Well, let me just encourage you to submit your questions, and encourage you all to submit your responses in a timely fashion. We anticipate that all of the pages of the budget document will be available today for us to vote on, and that we will have an indication of our monies available, that the 302(b) allocations will be forthcoming in a timely fashion, and we are going to probably begin the process of writing our bill.

But I just want to assure you both that your request for a reduction in monies for your agency is guaranteed to be at least that much. So with that, we thank you for coming and thank you for your messages.

Mr. Barrett. Thank you, sir.

Dr. Huntoon. Thank you.

[The questions and answers for the record follow:]

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